CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR REAL ASSETS

July 1, 2011 April 11, 2011

This policy is effective immediately upon adoption and supersedes all previous Real Estate and Inflation-Linked Asset Class policies.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Real Assets Program ("Program"), consisting of the following component programs:

A. Attachment A – Real Estate

- 1. Attachment A1 For-Sale Residential and Land Development Program
- 2. Attachment A2 California Urban Real Estate Program
- 3. Attachment A3 Public Real Estate Equity Securities Program
- 4. Attachment A4 Agricultural Land Real Estate Program
- B. Attachment B Infrastructure Program
- C. Attachment C Forestland Program

The design of this Policy ensures that investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action while managing the Program. Additionally, use of this policy assures sufficient flexibility in managing investment risks and returns associated with the Program.

Only the Committee has authority to waive any provision of this Policy, including its Attachments reflecting the component programs.

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II. STRATEGIC OBJECTIVE AND ROLE

A. The strategic objective of the Program is to provide long horizon income return that is less sensitive to inflation risk.

B. The strategic role of the Program is to meet a <u>real rate-of-return</u> of 4 percent, after fees.

III. RESPONSIBILITIES

- A. CalPERS Investment Staff ("Staff") is responsible for the following:
 - 1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - Reporting to the Committee quarterly and more frequently if needed about:
 - a. The performance of component programs compared to the respective benchmarks; and,
 - b. Actual Program allocations compared to Policy targets and ranges.
 - 3. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, substantial changes, and all violations of Guidelines and Policies at the next Committee meeting. All events deemed materially important will be reported to the Board immediately. These reports shall include explanations of any violations and appropriate recommendations for corrective action.
 - 4. Specific responsibilities for each component program are detailed in the appropriate attachment.
- B. The responsibilities of component program Board consultants, who report directly to the Committee, are specified in the Role of Private Asset Class Board Investment Consultants Policy.
- C. The General Pension Consultant is responsible for:

Monitoring, evaluating, and reporting quarterly, to the Committee, on the performance of the Program relative to the strategic role, component program benchmarks, and Policy.

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D. For component programs that are managed by an External Manager ("Manager"), the Manager is responsible for aspects of portfolio management as set forth in each Manager's contract with CalPERS and shall fulfill the following duties:

- 1. Communicate with Staff as needed regarding investment strategy and investment results.
- 2. Monitor, analyze, and evaluate performance relative to the agreed upon benchmark.
- 3. Cooperate fully with CalPERS Staff, Custodian, and component program consultants concerning requests for information
- 4. Specific responsibilities of each component program Manager are detailed in the appropriate attachment.

IV. BENCHMARK

A. The benchmarks for the component programs are specified in the Benchmark Modification and Benchmark Details Policy.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Real Assets Program Allocations

Program allocation targets and ranges are listed in Table 1 below. Allocations are expressed as a percentage of the market value of the CalPERS Total Fund.

Table 1: Program Allocations

Component	Target*	Range*
Real Estate	10.0%	7.0% - 13.0%
Infrastructure	2.0%	1.0% – 3.0%
Forestland	1.0%	0.0% – 2.0%
Real Asset Class	13.0%	8.0% – 18.0%

^{*} Percentage of the CalPERS Fund.

B. Specific investment approaches and parameters for each component program are detailed in the appropriate attachment.

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VI. CALCULATIONS AND COMPUTATIONS

Specific descriptions of each component program calculations and computations requirements are detailed in the appropriate attachment.

VII. GLOSSARY OF TERMS

Key words used in this policy are defined in CalPERS Master Glossary of Terms.

Real Assets Program

Approved by the Policy Subcommittee:	April 11, 2011
Adopted by the Investment Committee:	May 16, 2011
Policy Effective:	July 1, 2011

The following attachments were previously individual policies or component programs of individual policies and are now consolidated into the Real Assets policy. The dates below reflect the revision history for each document.

Attachment A – Real Estate Program (including Attachments for – For-Sale Residential and Land Development Program, California Urban Real Estate Program, and Public Real Estate Equity Securities Program):

Approved by the Policy Subcommittee: April 17, 2009
Adopted by the Investment Committee: June 15, 2009
Admin changes due to adoption of Benchmark Policy: October 30, 2009
Approved by the Investment Committee: April 19, 2010

Agricultural Land Real Estate Program

Approved by the Policy Subcommittee:

Adopted by the Investment Committee:

Revised by the Policy Subcommittee:

Adopted by the Investment Committee:

August 11, 1999

November 13, 2000

June 11, 2004

August 16, 2004

Attachment B – Infrastructure

Approved by the Policy Subcommittee:

Adopted by the Investment Committee:

Revised by the Policy Subcommittee:

Approved by the Investment Committee:

Approved by the Investment Committee:

Revised by the Policy Subcommittee:

April 19, 2010

Revised by the Policy Subcommittee: April 19, 2010
Approved by the Investment Committee: May 17, 2010

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Attachment C - Forestland

Timber Real Estate

Approved by the Policy Subcommittee: August 12, 1998 Adopted by the Investment Committee: Sept. 14, 1998 Revised by the Policy Subcommittee: October 6, 2000 Approved by the Investment Committee: November 13, 2000 Revised by the Policy Subcommittee: December 14, 2001 Approved by the Investment Committee: December 17, 2001 Revised by the Policy Subcommittee: December 10, 2004 Approved by the Investment Committee: February 14, 2005

Name changed to Forestland Program

Revised by the Policy Subcommittee:

Approved by the Investment Committee:

Revised by the Policy Subcommittee:

April 19, 2010

Approved by the Investment Committee:

May 17, 2010

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR REAL ESTATE PROGRAM

July 1, 2011 April 11, 2011

This Policy is effective immediately upon adoption and supersedes all previous real estate portfolio policies as described below.

I. PURPOSE

This attachment to the Real Assets Policy sets forth the investment policy ("Policy") for the Real Estate Investment Portfolio ("Portfolio") The CalPERS Total Fund Statement of Investment Policy adopted by the CalPERS Investment Committee ("Committee") sets forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Real Estate Investment Portfolio ("Portfolio"). The design of this Policy ensures that investors, managers, partners, consultants, and other participants selected by the California Public Employees' Retirement System ("CalPERS") take prudent and careful action while managing the Portfolio. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with the Portfolio.

Only the Committee has authority to waive any provision of this Policy.

II. STRATEGIC OBJECTIVE AND ROLE

- A. In addition to strategic objectives described in the Real Assets Policy, section II., the Portfolio shall be managed, consistent with CalPERS fiduciary responsibility as set forth in the CalPERS Total Fund Statement of Investment Policy, to accomplish the following:
 - <u>1</u>A. Provide <u>a low correlation to equities indiversification to</u> the overall CalPERS Investment Portfolio:
 - <u>2</u>B. Generate <u>stable cash yields primarily</u>attractive <u>risk-adjusted rates</u> of return for CalPERS; and,
 - 3€. Provide a hedge against inflation.

B. As the equity allocation in the overall CalPERS Investment Portfolio is high and the risk contribution from equities is higher, the role of Real Estate in the overall CalPERS Investment Portfolio will be stable income oriented, moderately levered, low risk, and low correlation with equities. To fulfill this role, Real Estate will have ownership risk in real properties with stable cash yields. The major driver will be income, of which the majority will be cash yield. Real Estate is also a partial inflation hedge.

III. RESPONSIBILITIES

- A. <u>In addition to responsibilities described in the Real Assets Policy, section III.</u>, CalPERS Investment Staff ("Staff") is <u>also</u> responsible for the following:
 - 1.All aspects of Portfolio management, including monitoring, analyzing, and evaluating performance relative to the appropriate benchmark.
 - 2.1. Reporting to the Committee no less than quarterly, in the form of a Quarterly Real Estate Staff Report, the following items:
 - a. **Policy Variance.** Information comparing actual Portfolio composition versus the Policy limits and ranges for <u>Key Policy Parameters</u>. This section shall include:
 - (1) Variances for each Key Policy Parameter;
 - (2) <u>Explanations of the variances and Explanations of the variances and non-compliance, if any; and,</u>
 - (3) When applicable, aA summary update of the corrective plan and timeline to return the Portfolio to compliance with Policy.
 - b. <u>Leverage</u>. Information listing the:
 - (1) Amount and the type of leverage, including <u>recourse</u> and <u>non-recourse</u> amounts; and,
 - (2) Incremental changes to the recourse and non-recourse leverage amounts.
 - c. **Investment Activity**. Information summarizing:
 - (1) Investment proposals under consideration;

- (2) <u>Investment, Disposition</u>, and <u>Debt Financing Amounts</u> ("Investment Transaction Amounts") in due diligence; and.
- (3) Investment <u>Transaction Amounts</u>, <u>Disposition</u>, and <u>Debt Financing Amounts</u> closed during the period.
- <u>III.d.</u> Strategic Plan Update. Information outlining progress towards implementation items in the most recent <u>Real Estate</u> <u>Strategic Plan</u> adopted by the Committee for the Portfolio.
- 4.Monitoring the implementation of, and compliance with, the Policy. Staff shall notify the Committee <u>n.</u>when the Portfolio is out of compliance at the next meeting, or sooner if deemed necessary.
- <u>4.2.</u> Screening, evaluating, and approving investment proposals that meet <u>Real Estate Delegation Resolution</u> authority ("Delegated Authority") guidelines.
- Screening, evaluating, and recommending investment proposals to the Committee that are beyond the scope of Staff's Delegated Authority.
- <u>6.4.</u> For approved transactions, negotiating investment agreements and supervising the due diligence team in closing the investment.
- In managing the Portfolio, Staff will work cooperatively with the external resources it has retained as part of the <u>spring-fed pool</u>. Their primary purpose shall be to serve as an extension of Staff.
- Pursuant to Delegated Authority, Staff shall maintain an investment process including an internal Real Estate Investment Review Committee ("REICIRC") and a review by the CalPERS Real Estate Consultant. Each Investment Transaction Amount, Disposition, and Debt Financing Amount in excess of a materiality threshold established in Delegated Authority will require an independent fiduciary due diligence engagement providing a concurring prudent person opinion on the merits of the transaction following a fiduciary standard of care resulting in a favorable concurring opinion. The engagement is to be completed by one of the external resources in the spring-fed pool.
- B. The CalPERS Real Estate Consultant ("Real Estate Consultant"), who reports directly to the Committee, is responsible for:

- 1. Pursuant to Delegated Authority, for prospective Investment,
 Disposition, and Debt Financing Amounts, the Real Estate
 Consultant shall participate in the IRC and provide comments to the
 IRC on the investment merits and risks of the transaction.
- Reviewing prospective <u>Investment</u>, <u>Disposition</u>, and <u>Debt Financing</u>
 <u>Amounts</u> for compliance with Policy and Delegated Authority.
- 3. Monitoring the performance and diversification of the Portfolio relative to the benchmark, Policy, and other market participants.

 Monitoring of all existing real estate managers and partners.

 Evaluating managers' and partners' performance, strategies, and organizational changes.
- 4. Reporting to the Committee no less than quarterly, in the form of a

 Quarterly Real Estate Consultant's Report. At a minimum, the

 report shall address the following items:
- a. The performance and diversification of the Portfolio;
 - b. Leverage and credit accommodation amounts on the Portfolio;
 - c. Compliance of the Portfolio with the Policy and Real Estate Delegation Resolution;
 - d. A status and summary of <u>Investment</u>, <u>Disposition</u>, and <u>Debt</u>
 <u>Financing Amounts</u> reviewed through the IRC process;
 - e. The managers' and partners' performance, strategies, and organizational changes; and,
 - f. Current trends and issues in the real estate marketplace including strengths and weaknesses of the Portfolio, and opportunities and threats to the Portfolio.
- C.—The General Pension Consultant is responsible for:

Monitoring, evaluating, and reporting quarterly, to the Committee, on the performance of the Portfolio relative to the benchmark and Policy.

D. <u>In addition to responsibilities described in the Real Assets Policy, section III., e</u>Each manager and partner is responsible for all aspects of portfolio management as set forth in each manager's and partner's operating agreement or contract with CalPERS.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The performance objective of the Portfolio is to meet or exceed the two benchmarks.
- B. The benchmarks for the Real Estate Program are specified in the Benchmark Modification and Benchmark Details Policy.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Real Estate Portfolio Allocation

<u>The asset allocation range for the Portfolio is governed by the Real Assets policy, section V.</u>

B. General Approach

- 1. CalPERS shall provide capital to market leading real estate investment managers globally, with an emphasis on the United States. As an effective partner, CalPERS will be among the preferred choices of investment capital. This approach shall be pursued while maintaining the structures, systems, and processes to ensure that CalPERS principal is preserved and strategic objectives achievedrisk-adjusted returns are maximized.
- Top-down strategic assessments shall identify portfolio weightings and identify the most attractive segments of the market for investing. Based on these assessments, Staff shall proactively seek the most attractive investment opportunities, while maintaining appropriate diversification.
- 2. To manage the level of risk and return in the Portfolio, assets shall be categorized into risk classifications. Staff shall utilize investment structures including <u>Commingled Funds</u>, <u>Separate Accounts</u> (investment partnerships), Manager Contracts, <u>Real Estate Operating Companies</u>, and <u>Downstream Joint Ventures</u>. The preferred structure shall be Separate Accounts. The focus of the Portfolio shall be in large strategic relationships. Investments may be made in public or private debt or equity positions or other related real estate investments.

CB. Strategic Planning

A Strategic Plan approved by the Committee shall be maintained by Staff that sets forth CalPERS long-term objectives for investment and management of the Portfolio. The current, approved Strategic Plan shall be reviewed annually by Staff with results of the review reported to the Committee. There may be situations where revisions to the Strategic Plan

are required prior to the annual review. Changes to the Strategic Plan require Committee approval. Staff and the Real Estate Consultant shall develop and present a new Strategic Plan at a minimum every five years to the Committee. The CalPERS Real Estate Consultant ("Real Estate Consultant") shall review and comment.

D. Risk Classifications

For effective risk management, the Portfolio shall be divided into three risk classifications: Core, Value Add, and Opportunistic. Allocations to the sectors shall be made to <u>achieve the strategic objectives and fulfill the role of Real Estate in section II. earn a high rate of risk-adjusted return.</u>

Staff shall assign assets to one of the three risk classifications based on the asset's overall risk profile after consultation with the Real Estate Consultant. To the extent practical, individual assets shall be assigned to the appropriate risk classification. Staff and the Real Estate Consultant shall monitor the Portfolio's actual weightings against the ranges and targets.

As investments in the Opportunistic and Value Add risk classifications mature, their characteristics may migrate towards a more Core-like profile. Staff and the Real Estate Consultant shall monitor the Portfolio for instances when changes in the classification of investments are warranted. Reclassification will be made by Staff after consultation with the Real Estate Consultant and reported to the Committee.

1. Core Risk Classification

The Core risk classification includes investments that produce a predictable current net income yield after debt service. Typically Core assets shall exhibit institutional qualities that are well located within their local and regional markets and of high quality design and construction. Core assets shall include investments located only in Developed Markets. Core assets shall have low leverage and generally low risk/return profiles.

Core assets shall be limited to traditional property types: Office, Retail, Industrial, Multifamily, and Hotels. Mixed use projects incorporating the traditional product types are also acceptable.

All Public Real Estate Securities shall be considered Core.

2. Value Add Risk Classification

The Value Add risk classification includes assets that have the expectation to produce a predictable current net income yield after debt service within a reasonable time frame, typically one to three years. Capital investment may be required to develop, lease, redevelop, or renovate the assets. Value Add assets may have moderate leverage and moderate risk/return profiles.

The Value Add risk classification shall include investments located primarily in Developed Markets. Stabilized (Core like) private assets in Emerging Markets shall be considered Value Add.

3. Opportunistic Risk Classification

The Opportunistic risk classification includes assets that have the expectation to produce substantial capital <u>appreciation</u> and higher yields. Current income may be low or non-existent during the holding period of the asset. Opportunistic investments often exist because of inefficiencies in real estate or capital markets. The Opportunistic risk classification shall include investments with assets located in Developed, Emerging, and <u>Frontier Markets</u>. Investments in land shall be categorized as opportunistic. Opportunistic investments may have high leverage and high risk/return profiles.

E. Portfolio Structure

The overall Portfolio will be comprised of two sub portfolios, the Strategic and Legacy Portfolios. The Strategic Portfolio will be comprised of assets that fit the Strategic Plan. The Legacy Portfolio will be comprised of remaining assets and shall be managed to optimization.

The Strategic Portfolio will be comprised of three sub-portfolios, the Base, Domestic Tactical, and International Tactical Portfolios, and shall have the following allocation range limits:

Strategic Portfolio	Allocation Range
<u>Base</u>	60 to 100%
Domestic Tactical	<u>0 to 30%</u>
International Tactical	<u>0 to 15%</u>

1. Base Portfolio

The objective of the Base Portfolio is generation of stable cash flows within a long term hold strategy and structure. The risk profile

will be Core, return profile Income. It will be comprised of stabilized high quality assets in high quality U.S. Primary Market locations and track the CalPERS Total Fund Portfolio in size.

2. Domestic Tactical Portfolio

The objective of the Domestic Tactical Portfolio is to have a focus on total return which includes a blend of income and appreciation components. Individual investments may have Core, Value Add, and Opportunistic risk profiles, but the Domestic Tactical Portfolio as a whole will have a risk profile with a target between Core and Value Add. The return profile will be growth. It will be comprised of stabilized, development, and repositioning/distressed situation assets in the United States varying in size with market opportunities.

International Tactical Portfolio

The objective of the International Tactical Portfolio is total return through growth in emerging markets. Individual investments may have Core, Value Add, and Opportunistic risk profiles, but the International Tactical Portfolio as a whole will have a risk profile with a target between Value-Add and Opportunistic. The return profile will be income and growth. It will be comprised of stabilized and development/repositioning ex-U.S. assets varying in size with market opportunities.

<u>F.</u> Other Programs

To capitalize on trends in the real estate investment industry, the Committee may from time to time approve other programs. Investments in real estate assets made under these programs shall comply with all provisions of this Policy, including diversification limits and structuring requirements. To the extent these programs require specific policy direction, such direction will be provided as an attachment to this Policy. Attached hereto are the following specific programs:

- 1. Attachment A<u>1</u> For Sale Residential and Land Development;
- 2. Attachment A2B California Urban Real Estate ("CURE"); and,
- 3. Attachment A3C Public Real Estate Equity Securities; and,
- Attachment A4 Agricultural Land Real Estate Program.

<u>G</u>E. Diversification and Limits

- The overall Portfolio shall maintain an appropriate level of diversification to mitigate risk. Key Policy Parameters shall be measured at the <u>overall</u> Portfolio level, inclusive of all risk classifications, geographic guidelines, and property types, and <u>leverage characteristics</u>.
- 2. In order for Staff to implement the Strategic Plan and optimize the Legacy Portfolio during an anticipated 5 to 7 year transition period to full compliance with Policy, Staff may consider, pursue due diligence, and close Investment Transaction Amounts in the overall Portfolio in cases where Key Policy Parameters exceed limits or the proposed transaction would cause limits to be exceeded on a proforma basis.

<u>Staff shall update the Committee quarterly on progress toward implementation of the Strategic Plan and compliance with Policy.</u>

- Classification of investments with respect to the Key Policy Parameters will be determined by Staff after consultation with the Real Estate Consultant. Ranges shall be based on current Net Assets at Fair Market Value. The following are Key Policy Parameters (with additional Key Policy Parameters in Section X):
 - <u>a</u>4. Risk Classification (Core, Value Add, Opportunistic)

The Portfolio shall have the following ranges:

Risk Classification	Range
Core	<u>75</u> 20% -
	<u>100</u> 80%
Value Add	40% - <u>25</u> 60%
Opportunistic	<u>0</u> 40% - <u>25</u> 40%

The Real Estate Strategic Plan shall contain more narrow targeted ranges for each risk classification. Progress toward targeted ranges shall be reported to the Committee in the Quarterly Real Estate Staff Report.

b2. Geographic Guidelines

CalPERS shall pursue a global real estate investment strategy, with emphasis in the United States. The following guidelines will apply across the Portfolio. The global universe will be divided as follows for purposes of

delineating the geographic diversification of real estate investments:

Region	Allocation	Definition
Developed Markets "Developed Markets" is further bifurcated into US and Ex-US markets.	75% -100%	As defined by the FTSE Global Equity Index Series.
US	<u>85</u> 40% - <u>100</u> 90%	US NCREIF regions + <u>US territories</u> Puerto Rico
Ex-US* *investment in any one Ex-US country is limited to 20% of the total real estate portfolio	40% - <u>25</u> 60%	Any location outside of US market as defined above
Emerging Markets	0% - <u>15</u> 20 %	As defined by the FTSE Global Equity Index Series as "Advanced Emerging" or "Secondary Emerging"
Frontier Markets	0% - 5%	Countries not defined by the FTSE Global Equity Index Series as "Developed", "Advanced Emerging", or "Secondary Emerging"

In addition, Staff and the Real Estate Consultant shall monitor concentrations by region, country, and metropolitan area.

<u>c</u>3. Property Type

The Portfolio will have the following limits:

	Limits
Office	<u>45</u> 35%
Industrial	<u>45</u> 35%
Retail	<u>45</u> 35%
Multifamily	<u>45</u> 35%
For Sale Residential and	<u>10</u> 20%
Land Development	
Senior Housing	10%
Hotels	10%
Urban Mixed-Use	<u>10%</u>
Other Property Types	10%

d4.___Public Securities

Public Securities shall not exceed 25% of the Portfolio.

F.H. Guidelines for Non-Developed Markets Investments

1. CalPERS Emerging Equity Markets Principles

Staff, managers, and partners shall be guided by the CalPERS Emerging Equity Markets Principles for all real estate investments in such countries. Staff shall report any such exposure on an annual basis to the Committee.

2. United Nations Principles for Responsible Investment

For investments in Developed, Emerging, and Frontier Markets, Staff shall make every effort to apply the United Nations Principles for Responsible Investments.

Frontier Market Investing

Frontier Market investing shall be allowed only if approved by the Committee, with the following exception. Investments in individual commingled funds which contain strategies for investing up to 10% in Frontier Markets are permissible and are not required to be approved by the Committee.

GI. Quality Control

1. Staff Internal Procedures Manual

Staff shall maintain an internal procedure manual ("Manual"). The Manual will provide guidance and mandatory steps for key procedures, risk mitigation measures, and processes in the Global Real Estate Unit. The Senior Investment Officer, Real Estate ("SIO-RE") and Real Estate Consultant shall approve the initial Manual. Annually, Staff and the Real Estate Consultant shall review the Manual to ensure the Manual is consistent with sound best business practices in the institutional investment industry and that the Real Estate Program is being managed in accordance with the Manual. Substantive changes to the Manual require the Senior Investment Officer, Real Assets SIO-RAE's and Real Estate Consultant's approval.

2. Due Diligence Process

Staff shall conduct and manage a due diligence process for new Investment <u>Transaction</u>, <u>Disposition</u>, and <u>Debt Financing</u> Amounts. The Real Estate Delegation Resolution includes specific requirements for reviews.

3. Process Monitoring

Staff shall maintain reports and systems to monitor transaction processing, due diligence, and approvals to ensure timely decision making and an effective process.

4. Database

Staff shall maintain information systems, including a relational database, to provide analysis of the Portfolio's current composition. The systems will assist in maintaining the diversification of the Portfolio.

H<u>J</u>. Specific Risk Parameters

There are specific risks associated with investments that shall be monitored and mitigated. Each segment of the real estate market contains uncertainties that are unique to it. Staff shall manage and monitor and the Real Estate Consultant shall monitor the following major categories of uncertainties commensurate with the expected return as an investment proposal is considered:

Concentration Risk

Excessive concentration of the Portfolio in a particular vintage year, geographic location, product type, or life cycle stage will increase the volatility and risk of the Portfolio.

Structural Risk

Generally, CalPERS accesses the real estate markets by providing equity to partnerships. The terms and conditions of these partnerships will have a material impact on the liquidity of CalPERS capital.

Liquidity

Real estate is an illiquid asset class, particularly during periods of tight credit markets. In addition, there can be illiquidity at the partnership levels of the investment vehicle.

4. Leverage

Increasing Portfolio leverage will increase volatility, magnifying both positive and negative changes in appreciation and depreciation. Specific risk controls associated with leverage are detailed in Section X.

5. Country Risk

Individual country real estate markets and financial environments will present unique investment risks. Currency exchange rates will impact returns. CalPERS <u>international</u> investments may be subject to taxation. For emerging markets there will be a lack of reliable and consistent real estate market information and local employment and demographic data. Regulatory environments, legal systems, and political systems will vary by country and may change over time. Repatriation of capital is a risk in some countries.

6. Development Risk

Development projects have entitlement risks which require management. Changes to the entitlement status of a parcel will have dramatic impact on the value of an investment. Generally, the further along in the entitlement process, the lower the risk. Development projects also have the potential for construction cost overruns which can impact returns of the project.

7. Hazardous Waste

Real estate may be contaminated by hazardous materials. The cost of clean-up and other liabilities created by environmental laws associated with contaminated real estate may have a significant effect on investment returns. The risk may be addressed by conducting appropriate investigations of potential hazardous materials contaminations in the due diligence review of the real estate to assess environmental risk and, if it exists and mitigation is feasible, adopting appropriate risk mitigation measures.

8. Operating Risk

Real estate investments contain a business operating risk component. Certain property types have a greater business operating component, such as Hotels.

VI. CALCULATIONS AND COMPUTATIONS

A. Real Estate Valuations

Real estate valuations shall be governed by the Statement of Investment Policy for Appraisal of CalPERS Real Estate Interests.

B. Performance Measurement

A comprehensive Real Estate Quarterly Performance Report for the Portfolio shall be prepared by the Performance Monitoring Unit in accordance with the Statement of Investment Policy for Appraisal of CalPERS Real Estate Interests. The Global Real Estate Unit shall be responsible for reviewing and providing comments to Quarterly Performance Reports.

VII. INVESTMENT STRUCTURES

CalPERS may invest capital for the Portfolio through a variety of legal structures, including Commingled Funds, Separate Accounts, Manager Contracts, Real Estate Operating Companies, and Downstream Joint Ventures. Investment partnerships in which CalPERS invests may be structured as partnerships, limited liability companies, corporations, or trusts. CalPERS should be a limited liability investor in order to limit any loss to the amount of the investment. CalPERS should possess an appropriate level of control over management of the investment partnership.

A. Types of Structures

- 1. Commingled Fund Structures
 - a. In a Commingled Fund, CalPERS is one of many investors in an investment partnership managed by a <u>general partner</u> or manager. Investor governance and control provisions for Commingled Funds should reflect the proportion of capital being supplied by CalPERS in relation to the capital of the other investors.
 - b. Investments in closed end funds, open end funds, and <u>side</u> <u>by side investments</u> are allowed.
 - c. Commingled Fund structures shall be utilized only under the following conditions:
 - (1) The Commingled Fund provides access to a superior management team; or
 - (2) The Commingled Fund provides access to a unique investment strategy.

2. Separate Account Structures

- A Separate Account is a form of investment partnership a. between CalPERS and a manager or partner. It creates a beneficial one-on-one relationship to invest capital for the Portfolio. The manager or partner must should undertake the fiduciary duty to perform its responsibilities solely in the interest of CalPERS and must should agree to use reasonable care and prudence in performing those responsibilities. Staff must should endeavor to implement a strategy to align the investment interests of CalPERS and the manager or partner in the Separate Account consistent with the alignment of interest principles as detailed in the Manualby employing such techniques as co-investment of capital by the manager or partner, dedication of a senior management team to the investment partnership, and payment of incentive compensation for achievement of investment targets.
- b. Based on the criteria described in Section VIII.C of this Policy, CalPERS may enter into Separate Accounts with any of the following types of managers or partners:

- (1) Developers;
- (2) Owner Operators;
- (3) Real Estate Operating Companies;
- (4) Investment Managers; and,
- (5) Emerging Managers.
- C. Governance and control provisions for CalPERS in Separate Accounts should be adequate to protect the interests of CalPERS considering the amount and term of the capital commitment of CalPERS, the size and number of the investments in the Separate Account, the duration of the CalPERS Separate Account, and experience relationship with the manager or partner. The manager or partner may be given discretion to execute investment transactions as long as all transactions comply applicable CalPERS Investment Policies and the requirements of the Separate Account agreement.

3. Manager Contracts

- a. Manager Contracts, which are contracts between CalPERS and a manager to accomplish a particular investment strategy, should be used primarily for Public Real Estate Securities investments.
- b. Manager Contracts <u>mustshould</u> be structured to comply with CalPERS contracting policies.
- 4. Real Estate Operating Company Investments

CalPERS may make strategic investments in private companies which derive a substantial majority of revenues from real estate activities. Operating companies are a high risk/return investment and should be priced accordingly.

- 5. Downstream Joint Ventures
 - a. A Downstream Joint Venture is an investment partnership between a Commingled Fund or a Separate Account (or CalPERS directly) and one or more third parties to invest as co-owners in real estate. Downstream Joint Ventures increase liquidity risk by increasing the inability of CalPERS

to dispose of its investment in a timely manner and add credit risk of potential loss due to the default of the third party Downstream Joint Venture partner.

b. The governance rights of CalPERS (or its Separate Account) as well as the right to receive distributions of income and profits should be proportionate to the amount or value of the contributions of the Downstream Joint Venture partners. CalPERS (or its Separate Account) should have an exit strategy (such as a buy/sell procedure in the <u>Joint Venture</u> agreement) to permit liquidation of the investment.

B. Legal Structures

Investment partnership agreements will utilize, to the extent practicable, a legal structure which:

- 1. Limits CalPERS financial exposure; and,
- 2. Minimizes tax, fee, and other liabilities.

C. Required Terms

Staff shall maintain, as part of the Manual, a standardized list of required and recommended or suggested terms to be included in investment partnership agreements consistent with the alignment of interest principles.

VIII. INVESTMENT SELECTION

A. Investment Authority

Managers and partners shall be selected by CalPERS Staff or the Committee pursuant to Delegated Authority. The Real Estate Delegation Resolution specifies when Committee approval of an Investment <u>Transaction Amount</u>, <u>Disposition</u>, and <u>Debt Financing Amount</u> is required.

B. Investment Process

When Staff has Delegated Authority, the following steps are required to be completed prior to closing an Investment <u>Transaction Amount</u>, <u>Disposition</u>, and <u>Debt Financing Amount</u>:

SIO-R▲E. SIO-R▲E approval is required after review by the REICIRC;

- a.Review from Real Estate Consultant. Review by the Real Estate Consultant is required. Review is defined as participation in the IRC, including documentation of the Real Estate Consultant's comments;
- 3.2. Independent <u>Due Diligence</u>Fiduciary Concurring Opinion. <u>For Investment Transaction Amounts in excess of a materiality threshold established in Delegated Authority, aAn independent Fiduciary due diligence engagement is required to be performed. <u>In such cases, aA</u> written favorable concurring <u>prudent person opinion on the merits of the transaction, following a fiduciary standard of care, is required;</u></u>
- <u>4.3.</u> Policy Compliance Review. The Real Estate Consultant is required to document the transaction complies with Policy and Delegated Authority; and,
- 5.4. Legal Review. For Investment Transaction Amounts in excess of a materiality threshold established in Delegated Authority, the Legal Office is required to document the transaction complies with Delegated Authority.

C. Investment Criteria

Prospective managers and partners and investments shall be evaluated for selection based upon, but not limited to, the following criteria:

- 1. The suitability of the prospective investment strategy relative to the Real Estate Strategic Plan.
- 2. The expected risks and returns of the investment and the investment's impact on the existing Portfolio's characteristics.
- 3. The investment time horizon and potential exit strategies for investments.
- 4. The quality, stability, integrity, and experience of the management team.
- 5. The management team's track record.
- 6. The leverage strategy of the proposed investment and its compliance with CalPERS policy and the management team's track record specifically with respect to utilization of leverage.

- 7. The ability and willingness of the organization to dedicate sufficient resources and personnel to optimally manage CalPERS investments.
- 8. The reasonableness of investment terms and conditions, including provisions to align interests of the firm, the management team, and CalPERS.
- 9. The amount of <u>co-investment</u> by the firm and the management team.
- 10. The profit sharing plan of the firm.
- 11. The appropriateness of management controls and reporting system.
- 12. The potential tax liabilities of the investment.

D. Investment Parameters

- Subject to the provisions of Section VIII.D.7 below, CalPERS will
 not participate in private real estate investment strategies that rely
 on or result in eliminating rent-regulated housing units, converting
 such units to market rate units, or raising rents above regulated
 levels as determined by the appropriate governing authority.
- 2. This Section is intended to prevent the displacement of low-income or workforce households in rent regulated units. However, this Section is not intended to prohibit investment in strategies that create new, or redevelop existing rent-regulated housing units, including, without limitation, strategies that include demolition of existing rent-regulated housing units, provided that:
 - a. Any rent-regulated housing units that are demolished as part of such investment or project are replaced with new rent-regulated housing units.
 - b. Any persons lawfully residing in rent-regulated units who are displaced as a result of such strategies receive relocation benefits in accordance with relocation requirements as mandated by the local housing authority or by state or federal relocation laws, if applicable.
- 3. This Section shall not prohibit investment in existing low income housing tax credit or multi-family housing revenue bond financed

assets with regulatory agreements that limit, among other things, allowable rent increases.

- 4. Rent increases permitted by federal, state, or local law, regulation, ordinance or agreement for rent-regulated properties shall be deemed appropriate and consistent with this Policy.
- 5. This Section shall not prohibit lawful eviction for cause (e.g., illegal activity, tenant safety issues or non-payment of rent) or activities that are necessary to carry out the creation of new or redevelopment of existing rent-regulated housing units described in Section VIII.D.2 above.
- 6. If the Staff determines that an investment manager makes investments that are materially inconsistent with this Section, Staff will consider all reasonably available remedies and recommend to the Board such actions to address the violation in manner that is consistent with the Board's fiduciary duty, including not making any new investments with that manager.
- 7. Nothing in this Section shall require the Board to take any action that is inconsistent with the Board's fiduciary duty.
- 8. This Section shall become effective on the date of adoption and shall apply to investments made on or after that date. Investments made before the effective date of this Section shall also be subject to this Section to the fullest extent appropriate, as determined by Staff taking into account existing contractual commitments and all other relevant factors.

IX. MANAGER AND PARTNER MONITORING

Staff shall monitor and evaluate managers and partners on an ongoing basis based on performance relative to stated objectives of the governing documents. The financial strength of the investment management organization, the level of client service given CalPERS, and changes within the managing organization shall be evaluated. The continuity of personnel assigned to CalPERS investments and overall staff turnover shall be reviewed.

X. LEVERAGE

Leverage may be utilized in the Portfolio to enhance returns. The increased risk associated with higher levels of leverage shall be considered in establishing acceptable rates of return.

A. Leverage Limitations

Leverage limits shall be imposed at the Portfolio and Risk Classification levels. Leverage limitations shall be measured on a Loan-to-Value (LTV) ratio and <u>Debt Service Coverage Ratio</u> ("DSCR") basis.

Loan-to-Value Limits:

Risk Classification	LTV Limit	Portfolio Limit
Core	<u>50</u> 45%	
Value Add	<u>50</u> 65%	<u>50</u> 60%
Opportunistic	<u>50</u> 75%	

The average leverage guidelines in the table above are applicable for each category. Individual investments within a category may exceed the guideline. The above limitations apply to all debt, excluding Public Real Estate Securities, in total including recourse and non-recourse debt.

The <u>Strategic Portfolio will have a DSCRDebt Service Coverage Ratio for the Core risk classification will have a minimum value of 1.50 for the total portfolio and 2.00 for the Core risk classification.</u> The Value Add and Opportunistic risk classifications will have no minimum D<u>SCR</u>ebt Service Coverage Ratio.

B. Leverage Structures

Interest rate structures may include fixed or variable/floating interest rates and amortizing or non-amortizing structures. Lines of Credit secured by the partnership or partnership assets are permissible. Hedging techniques utilized by partners to control interest rate risk may be used including, but not limited to interest rate swaps, interest rate caps, and collars. Prudent use of both fixed and variable/floating interest rate structures are appropriate in a dynamic real estate portfolio.

Leverage may be secured or unsecured and recourse or non-recourse. Recourse debt is debt for which CalPERS has the obligation (direct or indirect, absolute or contingent) to pay the debt to the lender. Debt that may be recourse to a Separate Account or a Commingled Fund or a Joint Venture but for which CalPERS has no obligation will be treated as non-recourse debt for the purpose of this Policy.

C. Recourse Debt

1. Limitations

The total <u>Recourse Debt Allocated</u> shall not exceed 10% of the lower of the current Net Asset Value or the target Net Asset Value of the Portfolio.

2. Approval of Utilization of Recourse Debt

Utilization of recourse debt incurred by CalPERS requires written approval by the SIO-R $\underline{\underline{A}}$ $\underline{\underline{E}}$ (subject to discretion allowed by the Real Estate Delegation Resolution).

Types of Recourse Debt

Two types of recourse debt are allowed: <u>Subscription Financing</u> and Credit Accommodation.

a. Subscription Financing

Subscription financing is short term financing utilized by Separate Accounts and commingled funds to consolidate and finance capital calls. The lender's security for subscription financing is a pledge from CalPERS to fund the capital calls. Subscription financing may be utilized in the Portfolio subject to the following limitations:

- (1) The amount of <u>Subscription Financing Allocated</u> secured by CalPERS capital commitment cannot exceed CalPERS equity commitment;
- (2) The <u>Subscription Financing Outstanding</u> cannot be outstanding more than 12 months; and,
- (3) The total Subscription Financing Outstanding amount shall be included in the LTV limit calculation.

b. <u>Credit Accommodation</u>

Credit accommodation generally refers to a guaranty executed by CalPERS whereby CalPERS agrees to pay the debt obligation of an entity, in the event the entity fails to pay the debt obligation. The entity will usually be a <u>limited partnership</u> or limited liability company, and will be majority-owned by CalPERS. The debt obligation that CalPERS guarantees will be evidenced by an extension of credit (e.g., loan, line of credit, or other form of credit facility) by a

financial institution to the entity. The benefit provided to CalPERS is that the guaranty will tend to lower the borrowing cost for the entity and should, in turn, enhance the overall return to the real estate investment. Guarantees become a contingent liability on the CalPERS overall balance sheet and should be used only when they provide economic benefit. Credit accommodation differs from credit enhancement in that a credit accommodation does not derive its rating from the CalPERS Credit Enhancement Program (CEP) rating (either implied or explicitly). In addition, Credit Accommodation is made for an entity in which CalPERS has an existing, or proposed, ownership interest. Credit enhancement is the use of CalPERS balance sheet, through the program rating, in which CalPERS has no initial ownership interest and where CalPERS receives explicit consideration for the enhancement.

- (1) With the exception of transactions included in (2) below, credit accommodations will not exceed 10 years from the closing of the investment.
- (2) For affordable housing, workforce housing, and community development investment transactions financed in part with public subsidies, credit accommodations will not exceed 30 years from the closing of the investment.
- (3) The total <u>Credit Accommodation Outstanding</u> amount shall be included in the LTV limit calculation.

D. Reporting

Staff will report on leverage and incremental changes in leverage as part of their responsibilities outlined in Section III.

XI. GLOSSARY OF TERMS

Key words used in this Policy are defined in CalPERS Master Glossary of Terms.

XII. PREVIOUS REAL ESTATE PORTFOLIO POLICIES

Previous real estate portfolio polices superseded by this Policy are:

A.California Urban Real Estate Policy

B.Core Apartment Real Estate

C.Core Industrial Real Estate

D.Core Office Real Estate

E.Core Retail Real Estate

F.Enhanced Core Index Public Real Estate Equity Securities

G.Equity Real Estate

H.Equity Real Estate Joint Ventures

I.Equity Real Estate Leverage

J.Franchise Finance Real Estate

K.Geographic Guidelines for Real Estate Investment

L.Global Public Real Estate Equity Securities

M.Hazardous Materials in Real Estate Investments

N.Opportunistic Real Estate

O.Real Estate Development

P.Real Estate Hybrid Debt Investments

Q.Real Estate Investment Manager Monitoring Program - Externally Managed

R.Real Estate Sale-Leaseback

S.Senior Housing Program

T.Single Family Housing Program

Approved by the Policy Subcommittee:	April 17, 2009
Adopted by the Investment Committee:	June 15, 2009
Admin changes due to adoption of Benchmark Policy:	October 30, 2009
Approved by the Investment Committee:	April 19, 2010
Revised by the Policy Subcommittee:	April 11, 2011
Approved by the Investment Committee:	May 16, 2011
Policy Effective:	July 1, 2011

FOR-SALE RESIDENTIAL AND LAND DEVELOPMENT PROGRAM

July 1, 2011 April 11, 2011

I. PURPOSE

This attachment sets forth the investment policy ("the Policy") for the For-Sale Residential and Land Development Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("CalPERS") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with single-family housing investment.

Investments in the Program shall comply with all requirements of the Real Estate Policy.

II. STRATEGIC OBJECTIVE

Achieving the highest total rate of return possible consistent with a prudent level of risk, the liabilities of CalPERS and investment guidelines herein are the strategic objective of the Program.

The Program shall be considered a specialized component of the opportunistic risk category and, as such, shall be required to achieve an appropriate risk-adjusted return. The *primary* emphasis of the Program is in the state of California.

The Program shall be managed to accomplish the following:

- A. Preserve investment capital;
- B. Generate attractive risk-adjusted rates of return for CalPERS as a total return investor;
- C. Provide a hedge against inflation; and
- D. Consider solely the interest of CalPERS participants and beneficiaries in accordance with California State Law.

III. INVESTMENT APPROACHES AND PARAMETERS

A. Risks

There are risks associated with investment in the single-family residential housing industry. The primary risks include, but are not limited to, the following:

1. Land Entitlement Risk

- a. Land entitlement risk reflects the risks assumed by an investor when purchasing a parcel of land prior to the tentative map and other discretionary political approvals being granted by the appropriate regulatory bodies (i.e., municipalities or planning agencies, or both) as to the final use of the property.
- b. In order to limit this risk, CalPERS shall invest primarily in land where a tentative map for the project has been obtained. The Program exposure to unentitled land shall generally not exceed 20% of the actual invested total Housing Program Portfolio.

2. Project/Development Risk

- a. Investment in single-family residential development and construction entails assuming the normal risks associated with development of this property type.
- b. These risks, some of which are controllable, include, but are not limited to, the following: cost overruns, project delays, contractor disputes, ineffective marketing, slow sales, price modifications, and potential litigation.
- c. Partners who are selected by CalPERS to manage funds invested in this property type shall be expected to undertake all appropriate steps to mitigate these risks.

Interest Rate Risk

- a. Fluctuating interest rates affect the affordability of housing for all buyers, especially for price-sensitive first-time buyers.
- b. The risk to the investor and homebuilder is that the standing inventory of homes may remain unsold for an extended period of time.

- c. The risk can be mitigated by careful economic analysis of market cycles, limited project life cycles, controlled standing inventory (by limiting starts ahead of sales), and maintained flexibility on pricing.
- d. Interest rate risk can also be partially mitigated by using interest rate hedging.
- e. Partners who undertake to manage invested funds in this property type shall be expected to closely examine strategies to mitigate interest rate risks and execute such strategies when appropriate.

B. Diversification

The Program shall be well diversified to minimize risk due to overexposure to any one risk factor. The Program shall be diversified by geography, strategy, product type, price mix, builder, project, and development life cycle. From time to time, adjustments to correct the actual investment to comply with the Policy allocation ranges shall be implemented on an opportunistic basis over a reasonable time frame (normally within a three-year period) and with ample consideration given to preserving investment returns to CalPERS.

CalPERS shall periodically review the Portfolio and Program Guidelines. CalPERS shall notify the partners when the Portfolio violates diversification guidelines and portfolio leverage.

1. Diversification by Geography

The Program shall diversify by geography. Major urban and suburban markets and submarkets shall be considered, but not more than 25% shall be invested in any single Metropolitan Statistical Area (MSA). California is the current primary focus of the Program, but CalPERS shall consider investments outside of California. In considering such investments outside of California, CalPERS shall maintain or strive to increase commitments within California consistent with its fiduciary obligations. The geographic allocation shall be reviewed periodically to determine appropriate levels.

2. Diversification by Strategy

CalPERS shall employ a broad range of strategies for Program investment. Allocation ranges for each strategy have been established and are listed below. To mitigate risk, CalPERS shall

place less emphasis on strategies carrying a greater degree of uncertainty.

Strategy	Allocation Range
Housing Joint Ventures	50 – 100%
Land Development	0 - 50%
Off-balance-sheet Financing	0 - 40%
Unentitled Land	0 - 20%
Entity Level Investments	0 - 10%
Related Investments	0 - 10%

The total allocation to land development, unentitled land, and offbalance sheet financing shall not exceed 50% of the Program.

Diversification by Product Type

Emphasis shall be placed on owner-occupied primary residences and entry-level housing. Other product types shall be considered, including, but not limited to, the following: first-time-move-up and second-time-move-up.

4. Diversification by Price Mix

The Program shall consider ranges of lot/home pricing that are appropriate within each region and submarket. Actual price levels shall be determined by specific markets and submarkets. The Program shall encourage, but not be limited to, affordable housing projects, which otherwise meet all prudent investment criteria. Pricing of homes shall be consistent with the first, second, and third-time buyers for the particular geographic market, within the limits otherwise established within the Policy.

5. Diversification by Builder

The Program shall consider diversifying among various builders to avoid business risk associated with a single partner entity. In the context of this Policy, "Builder" shall refer to either a homebuilder or a residential land developer. Builders shall represent expertise in a range and diversification of price mix and geography, and selection shall be based on financial strength and industry expertise. The desired Builders shall be leading developers with at least ten years' experience in the single-family housing or—residential land development industry.

For Committee and Staff contemplating the construction of homes, the desired Builders shall be either leading homebuilders (top tier),

or regional Builders with a niche focus on single-family residential development or affordable housing (second tier). For purposes of this Policy, a top-tier homebuilder is defined as one within the top 50 producers of homes within California (or the applicable state) during each of the last three years.

No more than 20% of total capital shall be committed to any one homebuilder. For the purposes of this Policy, entities that have substantial common ownership (greater than 10%) shall be considered a related entity; therefore, they shall be considered one Builder.

6. Diversification by Project

The Program shall diversify investments in such a manner that no one project shall dominate an individual partner allocation. No more than 35% of an individual Partner allocation, capped at \$100 million, shall be invested in any single project without CalPERS approval.

7. Diversification by Development Life Cycle

The Program shall diversify investments such that the development life cycle shall vary. Development Life Cycle is the total time the project progresses from market entry to exit. The maximum time period for completion of the development cycle of acquisition, development, construction, and sellout shall generally be five years. The expected project life cycle, from acquisition of entitled or unentitled land through the completion of construction of the final home, should be five years or less. No project with a life cycle greater than five years is permitted without the Staff's approval, except where partnership investment capital is returned within five years.

C. Investment Objectives and Criteria

1. Housing Joint Ventures

a. "Housing Joint Ventures" refers to properties that are acquired with the intention to develop or construct homes (including all forms of development for single-family housing, such as condominiums, town homes, zero lot line developments, planned unit developments with and without common areas, and standard subdivisions).

b. Investment Criteria

- (1) Generally, project size shall be limited to 400 units. Staff has the discretion to approve larger projects after reviewing investment parameters; and,
- (2) Each project shall be required to produce a minimum real rate of return (after fees) of 6%.

2. Land Development

a. "Land Development" refers to properties that are acquired with the intent to develop or construct infrastructure (including all forms of acquisition and infrastructure development for single-family housing, such as condominiums, town homes, zero lot line developments, planned unit developments with and without common area, and standard subdivisions).

b. Incidental Development

- (1) Incidental commercial/multi-family infra-structure lot development may be undertaken in the Program, provided that it is not a major cost of the overall single-family project.
- (2) Golf course construction may be undertaken provided that it is an essential or required component of the overall master plan for the single-family project. Furthermore, the business plan must contemplate liquidation of the golf course at or before the end of the project.

c. Investment Criteria

- (1) All Land Development investment shall meet the following conditions:
 - (a) Comply with the general plan and zoning ordinance of the governing jurisdiction;
 - (b) Comply with the provisions of the California Environmental Quality Act (CEQA) in California, or comparable local, state and federal environmental quality laws in other states:

- (c) Have an approved tentative map for the master development (tentative maps for individual parcels for sale to merchant builders are not required) or, as applicable, a development agreement approved by the governing jurisdiction; and,
- (d) Have received any other major discretionary approvals including those of the Coastal Commission and Local Agency Formation Commission, as applicable or comparable local, state, and federal agencies. This condition does not include the issuance of routine procedural approvals, (e.g., Department of Transportation, Fish & Game, Corps of Engineers, grading permits, building permits, or storm water discharge permits).
- (2) Generally, project size shall be limited to no more than 3000 lots. The Staff has the discretion to approve larger projects after reviewing investment parameters; and,
- (3) Each investment shall be required to produce a minimum real rate of return (after fees) of 8%.

Off-balance-sheet Financing

a. "Off-balance-sheet Financing" is a financing structure that allows a developer to improve its land without carrying the land inventory on its balance sheet. Typically, the developer is a publicly held company ("Public Builder"). CalPERS housing partners shall acquire the unimproved land from the Public Builder. Concurrent with the execution of the purchase and sale agreement, the partnership and the Public Builder will execute an option agreement granting the Public Builder the option to repurchase finished lots. Off-balance-sheet financed projects will be subject to the same policy requirements as conventionally financed projects.

b. Investment Criteria

(1) Project size shall be limited to the same criteria as above. Staff shall have the discretion to approve

larger projects after reviewing investment parameters; and,

(2) Each investment shall be required to produce a minimum real rate of return (after fees) of 7%.

4. Unentitled Land

a. "Unentitled Land" refers to land that complies with the general plan but does not have a tentative map, specific plan approval, zoning, or a development agreement from the governing jurisdiction.

b. Investment Criteria

- (1) Generally, project size shall be limited to the same criteria as Housing Joint Venture and Land Development; and,
- (2) Each investment shall be required to produce a minimum real rate of return (after fees) of 10%.

5. Entity Level Investments

a. "Entity Level Investments" refers to investments in debt, equity, or hybrid securities of entities whose principal assets are residential real estate.

b. Investment Criteria

- (1) CalPERS shall not make passive investments in publicly traded securities under this Program.
- (2) The minimum real rate of return (after fees) shall be determined on a case-by-case basis, depending on the applicable risk factors and structure of the investment opportunity.

6. Related Investments

a. "Related Investments" refers to other forms of investment not described above, debt or equity, related to Housing Joint Ventures, Land Development, Off-balance-sheet Financing, Unentitled Land, or Entity Level Investments.

b. Investment Criteria

- (1) Generally, project size shall be limited to the same criteria as Housing Joint Venture and Land Development. The Staff has the discretion to approve larger projects after reviewing investment parameters; and,
- (2) The minimum real rate of return (after fees) shall be determined on a case-by-case basis, depending on the applicable risk factors and structure of the investment opportunity.

D. Structure

1. Leverage

CalPERS desires an appropriate and diversified use of leverage (e.g., third-party entity, Mello-Roos, or other project financing debt). A range of leverage at investment level and entity level may be used by CalPERS partners.

The maximum amount of leverage on the Program Portfolio shall be 60% of cost or market value, whichever is greater. Leverage on individual projects shall not exceed 75% of cost or market value, whichever is greater. A temporary out-of-compliance period shall be allowed up to 75% leverage on the Program for no more than a six-month period, in which the General Partner's cash flow projection shows the Program returning to a 60% leverage ratio or less. In the event that the six-month period is not met, or projections exceed the temporary adjustment period, a capital call shall be made on the applicable partner or new investments in the applicable partnership shall cease. Unentitled Land shall not be leveraged unless it is favorable, non-recourse seller financing.

2. Equity

Equity requirements shall be set by the Program Guidelines. CalPERS recognizes that the financing markets for homebuilding projects are dynamic; therefore, CalPERS shall review and reconsider the equity requirements, as set forth in the Program Guidelines every six months.

E. Vehicles

Limited partnerships, limited liability companies, real estate operating companies, commingled funds, and separate accounts shall all be considered appropriate investment vehicles for implementing investments in this property type. However, any such vehicle chosen shall have a finite life and a requirement that the investment be self-liquidating at a time CalPERS considers appropriate. In all cases, CalPERS investment and risk of loss shall be limited to the amount initially committed. CalPERS and its partners shall structure transactions and utilize vehicles to minimize tax-related issues.

F. Program Guidelines

- CalPERS shall maintain standardized Program Guidelines in the Staff Internal Procedures Manual, which establishes operating definitions of program commitment periods, priority returns due CalPERS, and partner fees allowable. Program Guidelines may be changed from time to time in response to changing market conditions.
- 2. Program parameters in the Program Guidelines shall be developed by the real estate staff and the Real Estate Consultant as appropriate, and are subject to the approval of the Committee. Important program parameters shall include the following:
 - a. Program Size Funds allocated to the market segment;
 - b. Timing Target date for investment of allocated funds;
 - c. Diversification Target allocation of funds among geographic regions and submarkets within the market segment, as appropriate;
 - d. Investment Guidelines Specification of the investment guidelines for acceptable investments within the market segment; and,
 - e. Asset and Project Management Specification of the expected value-enhancing activities that shall result in maximizing returns to CalPERS.
- Unless specifically delegated in the contract, decision making in the Program shall be governed by the Real Estate Delegation of Authority.

IV. PARTNER RESPONSIBILITIES

A. Responsibility

The partner responsibilities shall include fiduciary responsibility to invest and manage CalPERS funds in this property type in a manner consistent with the Program Guidelines, as revised from time to time (in effect at the time of each project commitment by a partner), and within the limits set by this Policy.

B. Discretion

The partners shall have investment discretion regarding all project investment decisions; however, they shall comply with the stipulations outlined in the Policy regarding CalPERS approvals.

C. Reporting

CalPERS shall require that the partners make periodic reports as requested. CalPERS shall also have the right to audit and review the books, records, and operations of the partners. Such reviews may be conducted either by CalPERS Staff or by consultants at CalPERS discretion.

D. Conflicts of Interest

As part of the partners' standard reporting procedures, the partners shall fully disclose to CalPERS any existing relationships that may qualify as conflicts of interest.

V. GENERAL

Investment in the Program shall include direct or partnership investments where the predominant end-use is for-sale residential property or finished residential lots. This shall include single-family home construction as well as infrastructure development construction (including all forms of acquisition and infrastructure development for single-family housing, such as condominiums, town homes, zero lot line developments, planned unit developments with and without common areas, and standard subdivisions). Incidental commercial/multi-family infrastructure lot development, including golf course construction, may be undertaken in the Program with certain restrictions.

VI. PROJECT MANAGEMENT

Management Firms and Partners shall act in a fiduciary capacity, representing CalPERS interests in project management decisions, and-providing daily project

management services, as expertise and organizational structure allow. CalPERS shall give appropriate Delegation of Authority to management firms and require that they provide adequate measures of accountability.

A. Investor Approval

CalPERS shall require that it be informed of, but shall not participate in, the resolution of significant events that affect the investment and development process. Examples of these events include significant project cost overruns, schedule delays, contractor disputes, or commencement of litigation, and so forth. CalPERS approval rights shall be limited to those matters specified in this Policy and the Program Guidelines, approval of partnership level debt, major modifications of the partnership's investment structure, settlement of claims in excess of \$500,000, contracts with partners' affiliates, and other major partnership events.

B. Periodic Review

Partner relationships shall be subject to periodic review by CalPERS. The review shall include, but not be limited to, the following:

- 1. Original project schedules compared to actual deliveries;
- 2. Actual-compared-to-projected profit margins and absorption rates; and,
- 3. Actual-compared-to-projected returns, current and forecasted capital environments, market conditions, portfolio leverages, portfolio diversifications, and adherence to Policy and Program Guidelines

CALIFORNIA URBAN REAL ESTATE

July 1, 2011 April 11, 2011

I. PURPOSE

This attachment sets forth the investment policy ("the Policy") for the California Urban Real Estate (CURE) Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("CalPERS") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with the execution of real estate investment strategies.

Investments in the Program shall comply with all requirements of the Real Estate Policy.

II. STRATEGIC OBJECTIVE

Achieving the highest total rate of return for CalPERS is the strategic objective of the Program.

CURE investments include, but are not limited to low-to-moderate-income housing, multi-family low-income housing, commercial or residential or both, urban infill, community redevelopment, and rehabilitation of core properties. CalPERS shall make such investments under specified conditions and circumstances as described in this Policy. The structure of investment and long-term rate of return shall relate to the relative risk of the investment due to the type, nature of, and relative control over the investment. Minimum acceptable returns shall stay consistent with those defined by the Real Estate Policy. Returns shall remain acceptable unless the level of risk, as a result of guarantees or subsidies, is below the level associated with other real estate investments made by CalPERS.

III. INVESTMENT APPROACH AND PARAMETERS

A. Approach

Investment in the Program does not imply reduced expectations for returns or increased willingness to accept risk. CalPERS shall only invest in situations where the investment risk is no greater than in other real estate investments made by CalPERS. If the risk inherent in a particular project is unacceptably high, then CalPERS shall require guarantees,

subsidies, or other financial assistance by government agencies to reduce risk to an acceptable level.

CalPERS shall ensure investments meet the following criteria:

- 1. Meet standard of prudence required of other investments, and thus affirmatively meet the prudence and "sole-interest" standard.
- 2. Any benefit the investment may confer on other interests is not the responsibility or within the ability or control of CalPERS, but only of those who manage or are otherwise responsible for the target enterprise.

B. Asset Selection Criteria

The primary emphasis of the Program is in the State of California. The primary types of CURE projects covered by this Policy are outlined in the succeeding paragraph.

1. Residential, office, retail, entertainment, hotel, and mixed-use projects shall be considered. Asset selection shall be based upon traditional real estate measurements for long-term sustainability.

CalPERS shall consider projects and development sites characterized by the following key elements:

- a. Sufficient size to create a mix of uses and critical mass;
- b. Single ownership and control;
- c. Compatible surrounding land uses and densities;
- d. Environmentally clean or manageable remediation; and,
- e. Access to public and private transportation routes, housing, retail services, and amenities.
- Other projects that may not be specifically defined below, but that benefit certain economic groups or geographic areas and meet the risk/return objectives of CalPERS, may also be considered. This Policy addresses investments in both existing and development projects.
 - a. Low-income Housing Rental or for-sale housing projects with a portion of the units targeted for low-income or very-low income residents. (Low-income is defined as 80% of

median income; very-low income is defined as 50% of the median income.)

This category may include acquisition financing for public agencies seeking to purchase "at risk" rental projects where affordability is endangered by expiring rent restrictions. CalPERS may consider investing in for-sale projects with restricted affordability up to 120% of median income level when sponsored by a public agency attempting to promote home ownership. CalPERS shall require financial sponsorship or other assistance by the appropriate governing public agency prior to investment.

- b. Multi-family Low-income Housing Small group-care housing or shelters for disadvantaged groups. Additionally, this type of housing encompasses community development loan programs sponsored and subsidized by public or private entities offering low-interest loans and attractive terms to residents within a specific geographic area for neighborhood revitalization.
- c. Economic Development or Redevelopment Commercial, industrial, mixed-use, residential development or revitalization projects that may or may not leverage public resources. Their design directly benefits businesses, employees, or residents of low-to-moderate-income areas, or underserved markets.
- d. Urban Infill and "Smart Growth" Strategy - The acquisition, development, redevelopment, repositioning, conversion, and eventual disposition of office, retail, residential, hotel, and mixed-use projects. Smart Growth encompasses assorted initiatives addressing the increasing concern of communities about suburban sprawl and its impact on communities, open congestion, air quality, traffic and existing space. infrastructure. Many of these communities are redirecting development and infrastructure investment within the existing core. CalPERS shall seek profitable investment opportunities consistent with these trends. Such opportunities may include investment in traditional urban cores, urban infill, and suburban infill.

C. Investment Vehicles and Structures

CalPERS shall invest in CURE projects through equity structures and investment vehicles as allowed under the Policy.

- 1. For existing projects, the preferable structures include, but are not limited to, the following:
 - Commingled funds.
 - b. Direct equity investments.
 - c. Direct mortgages.
- 2. For development projects, the preferable structures include, but are not limited to, the following:
 - Commingled funds.
 - b. Direct equity investments.
 - c. Equity joint ventures.
 - d. Convertible participating mortgages.

CalPERS shall make investments in community housing and development projects through the assistance of investment advisors, affiliates, or partners familiar with such transactions.

D. Underwriting Criteria

Underwriting standards shall include demonstrated records of accomplishment in similar projects. Standards shall also include access to additional capital, if necessary, covering potential cost overruns, and no secondary collateral requirements unless essential. Where projects meet the underwriting criteria, CalPERS shall consider pricing concessions to support affordability on a case-by-case basis.

PUBLIC REAL ESTATE EQUITY SECURITIES (PREES)

July 1, 2011 April 11, 2011

I. PURPOSE

Unique advantages of investment in PREES include the following:

- A. Liquid, efficient, and cost-effective exposure to real estate generally;
- B. Exposure to real estate segments that are not available through the direct or private market therefore enhancing diversification;
- C. Facilitation of liquidity to maintain target allocations;
- D. PREES have unique risk and return characteristics reflective of the favorable tax treatment at the corporate level and the resulting distribution of income in the form of dividends; and,
- E. PREES provide for a strong corporate governance structure.

II. INVESTMENT APPROACHES AND PARAMETERS

A. Allocation to PREES

- The allocation to PREES within the Portfolio shall be at the prudent direction of the SIO-RA subject to: diversification limits in the Real Estate Policy and discretion allowed in the Real Estate Delegation Resolution. The factors considered in asset allocation and selection shall include, but are not limited to, the following:
 - The difference in valuation in the public versus the direct market in general or for a particular property type or company;
 - b. The ability to complement exposures in the direct real estate program;
 - c. The need for liquidity to facilitate a target allocation; and,
 - d. Niche opportunities presented in the public market.

B. Investment Styles

The Program may be managed internally or externally on a passive, enhanced or active basis subject to the following parameters:

	U.S.	Ex-US
Passive	Internal	Internal
	and External	and External
Enhanced Index	Internal and External	External
Active	External	External
Active	External	External

1. Passive Portfolio

- a. Under direction of the Real Estate Unit, the passive portfolio may be managed internally by the Global Equities Group.
- b. Trading activity will result from the execution of portfolio allocations made by the SIO-RA and will occur as often as necessary to maintain the desired positions of each security.
- c. Passive portfolios will attempt to replicate the characteristics and performance of the <u>benchmark index</u>. A benchmark index may be a subset of a market index after screening for sufficient liquidity as expressed by <u>market capitalization</u> or other criteria.
- d. The passive portfolio shall undergo <u>reconstitution</u> periodically as appropriate to the type of index.

2. Enhanced Index Portfolio

An enhanced index approach may be used to create a portfolio of stocks that mirror the performance of the benchmark index. The weight of each security shall be close to the weight of each security in the benchmark index. The per annum return of the enhanced index shall be within 1.5% per annum tracking error from the benchmark index.

Active Portfolio

Real Estate Staff may select a group of external managers for the active portfolio. Manager selection and allocations shall be

approved by the SIO-RAE and Real Estate Consultant in conjunction with the Request For Proposal process if applicable. Short selling strategies shall only be allowed in the domestic portfolio by external active managers after approval of the SIO-RAE and Real Estate Consultant. Performance criteria will be suited to the strategy and geographic mandate.

C. Monitoring

- Each PREES sub-portfolio will have a benchmark index appropriate to its strategy and geographic mandate. Performance criteria and benchmark indices for the program shall be determined by Staff and the Real Estate Consultant.
- Trading costs shall be measured no less than quarterly to ensure proper trading activity management. Staff shall report monthly internally to senior management, including but not limited to, the current market value of the portfolio and the performance of the portfolio versus the benchmark index as reported by the master custodian.
- 3. An over/under weight report shall be generated monthly to display the weight of all stocks in the portfolio relative to the benchmark index weights.

D. Permissible Investments

- 1. Securities that constitute the chosen benchmark index.
- 2. Securities which are companies in partnership or strategic alliances with CalPERS in managing and owning real estate.
- 3. Securities that are not contained in the benchmark index but nevertheless present a niche opportunity and provide a complement to the Portfolio.

E. Single Stock Concentration

Any security position which represents more than 5% of the outstanding shares of that security shall be liquidated as soon as it is cost effective to do so to avoid SEC reporting requirements and liquidity constraints.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR AGRICULTURAL LAND REAL ESTATE PROGRAM

July 1, 2011 April 11, 2011

This Policy is effective immediately upon adoption and supersedes all previous agricultural land real estate policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Agricultural Land Real Estate Investment Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("CalPERS the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with the Program.

<u>Investments in the Program shall comply with all requirements of the Real Estate policy.</u>

II. STRATEGIC OBJECTIVE

Achieving the highest total rate of return possible consistent with a prudent level of risk, the liabilities of <u>CalPERS</u>the <u>System</u>, and the investment guidelines contained herein is the strategic objective of this investment program. <u>CalPERS</u>The <u>System</u> shall consider its agricultural land investments as a component of the <u>opportunistic risk classification and, as such, specialized equity real estate portfolio. Therefore, such investments shall be required to achieve an appropriate risk-adjusted return.</u>

All investments in agricultural land are subject to the investment processes described in the Statement of Investment Policy for Equity Real Estate policy, as well as the Delegatedions of Authority, both incorporated by reference hereto.

The Agricultural Land Real Estate Portfolio ("the Portfolio") shall be managed to accomplish the following:

- A. Preserve investment capital;
- B. Generate attractive risk-adjusted rates of return for CalPERSthe System

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as a total return investor, including the following components:

- 1. Provide, at a minimum, moderate to low cash flow from operations; and
- 2. Provide appreciation potential resulting from biological growth and active management techniques including, but not limited to, agricultural best practices;
- C. Provide a hedge against inflation; and
- D. Consider solely the interests of <u>CalPERSthe System's</u> participants and beneficiaries in accordance with California State Law.

III. PERFORMANCE OBJECTIVES

The Portfolio shall be managed to assist <u>CalPERS</u>the <u>System</u> in achieving its overall long-term objectives as follows:

- A. Exceed, after fees, a minimum target real rate of return of 6.5%; and
- B. Exceed, before fees, the National Council of Real Estate Investment Fiduciaries Farmland Index ("NCREIF Farmland Index") while maintaining a prudent level of risk.

IV. INVESTMENT APPROACHES AND PARAMETERS

A. Risks

Compared to other real estate investments, agricultural land has several unique risks associated with it. Such risks include, but are not limited to, the following:

- 1. Government farm and trade policies' influence on investment economies;
- 2. Demand impact on commodity prices;
- 3. Currency fluctuations' impact on sensitive exports;
- 4. Weather and other natural elements' (e.g., unusual precipitation, damaging insects, and flooding) effects on crop yield and value;
- 5. Costs associated with long-term environmental and food safety issues:

- 6. Dependency on regional and local water supplies, as applicable;
- 7. Labor supply and demand factors related to agricultural operations;
- 8. Specialized nature of professional management; and
- 9. Stakeholder and consumer responses to industry practices (e.g., pesticide impacts on products, neighboring properties, and farm workers).

The potential for diversification among regions, investment characteristics, and commodity/product types mitigates some of these risks. The use of well-qualified farm managers familiar with the particular commodity and region also can minimize exposure to manageable risks. Furthermore, the advantages of investing in agricultural land include returns that have historically provided an inflation hedge and are negatively correlated with other property types.

B. Diversification

The Portfolio should be well diversified to minimize risks due to overexposure to any one risk factor. Market opportunities and conditions, rather than absolute and precise diversification targets, shall be the overriding factors in constructing the Portfolio. The Portfolio shall be diversified along the following criteria:

- 1. Asset Mix: Diversification between row crops (commodities such as, corn that must be replanted after harvesting) and– permanent crops (commodities such as, citrus fruits that do not need to be replanted on a periodic basis);
- 2. Geographic Region (representation in major agricultural regions);
- 3. Micro-diversification (diversification among micro-climate zones within geographic regions); and
- 4. Crop Type and Mix (diversification among crops with favorable outlooks and complementary risk/reward profiles, such as, organic vegetables).

C. Size

Agricultural land investment size at the transaction level depends on the opportunities available to <u>CalPERS</u>the <u>System</u>, with neither small nor large investments dominating the Portfolio. Location, acreage, and price

per acre of land purchased are factors determining the size and price of a transaction.

Investment size shall be appropriate to the projected risk/return level of the Portfolio. Large transactions may provide economies of scale in operations and pricing, but at the risk of less liquidity. Conversely, smaller transactions may be more liquid, but may not provide economies of scale in pricing, operations or both, as would those of larger transactions. The appropriate investment size shall also be a function of the Portfolio's target geographical and crop diversification.

D. Structure

Leveraged equity, equity, mortgages, entity-level, and hybrid investment structures are available to <u>CalPERS</u>the System. <u>CalPERS</u>The System shall adopt maximums for each type of investment structure prior to investment.

E. Vehicles

<u>CalPERS</u>The System shall invest in agricultural land on a direct or indirect basis. Should a commingled fund be chosen, <u>CalPERS</u>the System generally will not commit to investing more than 25% of the target size of any one commingled fund for the diversification provided by having multiple investors in commingled funds.

F. Selection of Management Firms

<u>CalPERS</u>The System shall select third-party investment advisors, general partners, operating company management teams, or other organizations (collectively referred to as "Management Firms") with specific expertise in agricultural land real estate investments to advise on or co-invest in its agricultural land investments.

- Management Firms shall provide expertise and experience in locating, negotiating, monitoring, and disposing of agricultural land investments. <u>CalPERSThe System</u> shall establish and document specific relevant criteria for each Management Firm prior to selection to establish the basis on which the selection shall be made.
- 2. <u>CalPERS The System</u> shall approve Management Firms based on their successful history or significant potential in managing and implementing agricultural land real estate investment programs, and their reputation.

- Due to the non-traditional, highly specialized nature of agricultural investment, Management Firms selected shall have investment and asset management discretion as delegated by <u>CalPERS</u>the System in accordance with the contract, with oversight and periodic review by <u>CalPERS</u>the System.
- Management Firms will represent only the interests of <u>CalPERS</u>the System in these transactions or only the interests of the investor group if <u>CalPERS</u>the System co-invests with another client or other clients of the advisors.

G. Investment Criteria

Generally <u>CalPERS</u>the System's agricultural investments shall include the following:

- 1. Land in parcels large enough to achieve operating efficiencies, yet small enough to maintain strong resale potential;
- 2. Land serviced by readily available water from either local sources or an efficient and secure regional/state water distribution system;
- 3. Land located in areas characterized by clement climatic conditions conducive to high yield levels;
- 4. Land demonstrating a consistent and favorable yield history;
- 5. Land with fertile soil requiring maintenance and enhancement within the cost range of industry norms; and
- 6. Land located close to market or distribution centers in order to reduce costs.

<u>CalPERS</u>The System may make exceptions to the criteria listed above upon completion of appropriate due diligence and documented demonstration of the investment efficacy of doing so.

H. Asset Management

Management Firms shall act in a fiduciary capacity and represent <u>CalPERS</u>the System's interests in asset management decisions, providing daily property management services, as expertise and organizational structure allow. <u>CalPERS</u>The System shall delegate appropriate authority

to Management Firms while requiring that they provide adequate measures of accountability.

<u>CalPERS</u>The System shall strive for consistency of financial and operational controls and reporting requirements, between <u>CalPERS</u>the System's <u>forestland</u>timberland and agricultural land investments. As appropriate, <u>CalPERS</u>the System may allow some minor modifications to reflect the specific asset management requirements of agricultural land investment.

V. GENERAL

<u>CalPERS</u> The System considers agricultural land an <u>opportunistic</u> "specialized" investment as it offers the opportunity for <u>CalPERS</u> the System to earn higher risk-adjusted returns than the <u>cCore and value add risk classifications</u> Portfolio. Agricultural <u>l</u>Land <u>i</u>Investment also minimizes overall portfolio risk due to its ability to diversify the <u>overall</u> Equity Real Estate Portfolio.

More specifically, investment in agricultural land provides additional diversification to <u>CalPERS</u>the System's portfolio, as its returns are negatively correlated with other property types. The structure of investment and long-term real rate of return shall be related to the relative risk of the investment due to geographic location, crop type, crop mix, and relative control over the investment.

VI. VALUATION

Unless otherwise noted, investors, managers, consultants, or other participants selected by <u>CalPERS</u>the System shall base all calculations and computations on fair-market value, as defined by the Uniform Standards of Professional Appraisal Practice (<u>USPAP</u>) of the Appraisal Foundation. Where there are differences between USPAP and agricultural industry best practices in appraising agricultural land, the standards of the agricultural industry shall be followed.

VII.ASSET ALLOCATION

As a percent of the total allocated Specialized Real Estate Portfolio, Agricultural Land, in aggregate with other Alternative Strategies, ¹ as further defined in the Specialized Policy, shall range from 0 to 30%.

From time to time, the actual investment may fall out of the allocation ranges prescribed by the Policy. In these instances, adjustments to correct the actual to comply with the Policy shall be implemented on an opportunistic basis over a

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⁴ Alternative Strategies also include opportunistic investment, hotels, franchise finance, and mezzanine debt investment programs.

reasonable time frame (normally within a three-year period). When making such adjustments, investors, managers, consultants, or other participants selected by the System shall give ample consideration to preserving the investment returns of the System.

VIII.GLOSSARY OF TERMS

Definitions for key words used in this policy are located in the Real Estate Glossary of Terms which is included in the System's Master Glossary of Terms.

Approved by the Policy Subcommittee: August 11, 1999
Adopted by the Investment Committee: November 13, 2000
Revised by the Policy Subcommittee: June 11, 2004
Adopted by the Investment Committee: August 16, 2004

INFRASTRUCTURE PROGRAM

July 1, 2011 April 11, 2011

This Policy is effective upon adoption.

I. PURPOSE

This attachment to the <u>Real</u><u>Inflation-Linked</u> Asset<u>s</u> Policy sets forth the investment policy ("Policy") for the Infrastructure Program ("Program").

II. STRATEGIC OBJECTIVE

In addition to strategic objectives described in the Real Assets Policy, section II., The Program shall be managed, consistent with CalPERS fiduciary responsibility as set forth in the CalPERS Total Fund statement of policy, to accomplish the following:

- A. Preserve investment capital;
- B. Generate attractive risk-adjusted rates of return for CalPERS as a total return investor, including the following components:
 - 1. Provide, at a minimum, moderate cash flow from operations with the generation of cash flow secondary to producing long term total returns; and,
 - 2. Provide appreciation potential as a result of employing operational improvements and active best management techniques and practices.
- C. Hedge against inflation;
- D. Hedge against long-term liabilities;
- E. Diversify CalPERS investments;
- F. Establish CalPERS reputation as a premier infrastructure investment manager and investor of choice within the investment community;
- G. Act as a responsible steward of Program investments through efficient operation of assets, delivery of quality services, utilization of responsible

labor and management practices and implementation of responsible environmental practices: and,

H. Foster renewal and expansion of infrastructure assets.

III. RESPONSIBILITIES

In addition to rResponsibilities are described in the RealInflation-Linked Assets Class Ppolicy, Section III., CalPERS Investment Staff ("Staff") is also responsible for reporting to the Committee quarterly or more frequently if needed about the performance of the Program. In addition, in managing this Program, Staff will work cooperatively with the External Resources it has retained as part of the spring-fed pool. Their primary purpose shall be to serve as an extension of Staff. Staff may also use outside experts, as appropriate, to provide specialized expertise in various disciplines, on a one time basis.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The long-term objective shall be to manage the Program to achieve real rates of return from individual assets held in the Program that exceed a target rate that is adjusted for risk depending on the nature of the investment including Leverage and the country and region in which it is located with the overall target stated in the benchmark noted in B below.
- B. The benchmark for the Program is specified in the Benchmark Modification and Benchmark Details Policy.

V.ASSET ALLOCATION

The Program asset allocation will comply with the Inflation-Linked Asset Class Policy. The Program allocation range does not include any leverage amounts associated with the investments.

YI.V. INVESTMENT APPROACHES AND PARAMETERS

A. <u>Asset Allocation</u>

The asset allocation range for the Program is governed by the Real Assets policy, section V.

B. General Approach

The Program shall seek to invest in opportunities within public and private infrastructure including but not limited to transportation, energy, natural resources, utilities, water, communications and certain social infrastructure projects that meet the Program objectives. Staff shall review and manage

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investments in a disciplined and <u>opportunistic</u> manner. Staff shall manage the Program as a whole with specific criteria appropriate to listed securities, partnership and <u>direct investments</u>.

Strategic assessments shall identify portfolio weightings and identify the most attractive segments of the market available for investing. Based on these assessments, Staff shall proactively seek out the most attractive investment opportunities, while maintaining appropriate diversification.

B.C. Infrastructure Program Strategy

The intent of the infrastructure program is to provide consistent, non-volatile and long term returns that exceed the benchmark of CPI plus 5% while incurring modest risk. The intent of the program is not to participate in high risk and highly-leveraged transactions with excessive external manager fee structures. However, it is recognized that leverage is a financing mechanism that is utilized with most infrastructure investments and can be prudently and appropriately deployed. External manager fees for the infrastructure program will be commensurate with the risk and return profile of the infrastructure program.

The Program Strategy shall be revised periodically as appropriate and updated as necessary.

Portfolio Allocation and Leverage

Sector	Strategy	Characteristics	Portfolio Allocation	Expected Real Return (CPI+)
Private	Core	 Mature, operating assets with steady cash flows from operations Low risk and typically low growth Perpetual or long-term monopoly positions Typically "buy and hold" assets Cash yield is the dominant part of total return. 	10% - 40%	3% - 5%
	Value Added	 Less mature, operating assets in a growth phase Higher return potential and higher risk in the execution of the growth strategies May involve an expansion of capacity May involve a "buy and build" strategy Cash yield and net capital 	40% - 70%	5% - 7%

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		appreciation are more or less equal.		
	Opportunistic	Can consist of greenfield construction and development High risk and high return potential May involve a roll up of small infrastructure businesses to create a regional or national platform Capital appreciation forms the dominant part of total return.	0% - 20% 8% - 12%	
Public	Listed	 Mature, operating assets with steady cash flows from operations Medium risk and modest growth Traded equities of infrastructure assets Liquidity and market beta Cash yield and capital appreciation are more or less equal. 	0% -10%	4% - 6%
		Total	100%	> 5%

The average leverage level for the infrastructure portfolio shall not exceed 65%. Individual investments may exceed the average leverage guideline depending upon the rating of the debt, <u>Debt Service Coverage Ratiodebt service coverage</u> and the general characteristics of the investments. Investments exceeding 50% leverage shall be presented to the Committee for review and approval. As more investments are made in the portfolio and investments are made in different geographies, subsectors and with various investment managers, leverage levels will subsequently decrease below the stated average leverage level. Staff will report the average level of leverage in the program to the Committee on a quarterly basis.

2. Investment Type Risk Matrix

The table below classifies investment types by risk for the purposes of investment selection and portfolio construction. The program will primarily target investments in the low and medium risk categories. Investments in the higher risk category will be considered to be part of the opportunistic segment and will not exceed 20% of program.

Risk Matrix				
Risk	Low Risk	Medium Risk	High Risk	
	Seasoned toll roads, bridges, and tunnels.	Airports, seaports	New build of toll roads, bridges, tunnels, airports	
	Regulated water/wastewater	Unregulated water/wastewater	Greenfield project development	
Project	Social infrastructure (hospitals, schools, prisons)	Industrial water/wastewater	Communications (broadcast, satellite, cable)	
Example	Regulated electric and gas	Contracted independent power generation	Merchant power plants	
		Gas pipelines and storage (including LNG)		
		Rail		
		Other		
		commercial/industrial infrastructure		
		Listed		

Power projects with significant commodity risks will be excluded unless such risks are mitigated or hedged. Merchant power projects which assume a spot price risk for power will be excluded.

3. Regional Allocation

Region	Allocation	Example
USA	40% -70%	
OECD Countries (ex-USA)	20% - 40%	Canada, Mexico, UK, Australia, Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey
Regions, non-USA, non-OECD	0% - 20%	Asia, Caribbean, Latin America, Central Europe, Middle East, North Africa

Staff will be guided by the CalPERS Emerging Market Principles in the case of direct investments in such countries and will report any investments on an annual basis. In the case of funds or partnership investments where CalPERS is a minority investor staff will report any emerging market investments relative to CalPERS Emerging Market Principles on an annual basis to the Committee.

4. Concentration Limits

Concentration Limits		
Any single investment in a partnership or fund	No more than 25% of committed capital	
Aggregate CalPERS commitment to a single general partner, fund or separate account	No more than 30% of CalPERS Infrastructure Program allocation	
Any single direct investment	No more than 10% of CalPERS Infrastructure Program allocation	
Equity investments	70% - 100%	
Debt investments	0% - 30%	

<u>C.D.</u> Domestic Public Private Partnerships

It is the intent of this policy that in evaluating those domestic Public Private Partnerships ("PPPs") in which CalPERS may invest, that Staff, and where appropriate, the Committee will consider the extent to which the sponsoring public entity and the investor(s) share in the benefits and risks associated with the PPP.

Infrastructure assets, by definition, support services that benefit society as a whole and are intended to serve a long and useful life. Recruiting and training a high quality workforce associated with these assets may lead to long term economic value by providing safe, reliable, efficient and high quality services.

<u>D.E.</u> Domestic Responsible Contractor Program, Preference and Domestic Public Sector Jobs

- 1. Responsible Contractor Policy and Preference
 - a. Staff shall secure written agreement from managers of any investment vehicle, for which the Responsible Contractor Program ("RCP") applies, such that all contractors, investors, managers, consultants or other participants shall adhere to CalPERS investment policy for the RCP, as amended from time to time by CalPERS, in its sole discretion.

- b. Preference: Staff shall give a strong preference to all domestic infrastructure investment vehicles that have adopted an internal policy regarding responsible contracting consistent with the CalPERS RCP subject to CalPERS fiduciary duty.
- c. This preference shall apply to any domestic infrastructure investment vehicle for which the RCP is not applicable by its terms other than to make a good faith effort to comply with the spirit of the policy. This specifically applies to investments including, but not limited to, commingled funds, opportunity funds, mezzanine debt, and hybrid debt investments.
- d. If the manager of any domestic investment vehicle does not agree to comply with Sections VI (D)(1)(a) or adopt an internal policy regarding responsible contracting, and, if Staff deems it appropriate based on all the circumstances, including the intent of this Policy as well as the investment merits of the investment vehicle, Staff may recommend the potential investment to the Committee and the Committee shall make a determination whether or not to invest in such investment vehicle.
- e. Enforcement: In the event it is determined that during the life of an investment vehicle there is a violation of the above stated terms, Staff shall be precluded from making an investment in a follow on fund with the investment manager. If Staff determines it appropriate, based on all the facts and circumstances, Staff may recommend the investment in the follow on fund to the Committee, which will determine whether to invest in the follow on fund consistent with its fiduciary duty. In addition, in situations where the RCP applies by the terms of this policy, all terms of the RCP including enforcement related terms would apply.

Domestic Public Sector Jobs

a. CalPERS intends, consistent with Section II and with CalPERS constitutional and statutory duties to act solely in the interest of, and for the purpose of providing benefits to, participants and their beneficiaries and to make sound and prudent investments, not to make investments that will result in job losses to CalPERS members. If CalPERS staff determines that it is in the best interest of CalPERS, consistent with CalPERS fiduciary responsibilities, to consider an investment that would directly impact California public sector jobs, staff will present the investment to the Committee for consideration.

- Staff shall secure a written agreement from the managers of b. any domestic investment vehicle (as described herein) that states, substantially in all material respects, that "in circumstances where the investment vehicle is working with a domestic state, local or municipal agency to establish PPPs or to bid on public offers for the sale, lease or management of public assets, the investment vehicle shall make every good faith effort to recognize the important role and contribution of public employees to the development and operation of such assets. In particular, the investment vehicle shall make every good faith effort to ensure that such transactions have no more than a de minimis adverse impact on existing employees. These efforts shall include working directly with public employees, government officials, or collective bargaining groups, as appropriate, in order to take such reasonable actions as may be within the investment vehicle's control to mitigate such potentially adverse effects. Compliance with this requirement shall be a consideration by CalPERS when reviewing any future investment opportunities with an investment manager.
- c. Enforcement: In the event it is determined that during the life of an investment vehicle there is a violation of the above stated terms, Staff shall be precluded from making an investment in a follow on fund with the investment manager. If Staff determines it appropriate, based on all the facts and circumstances, Staff may recommend the investment in the follow on fund to the Committee, which will determine whether to invest in the follow on fund consistent with its fiduciary duty. The follow on fund would be required to enter into the written agreement in subsection b above.

<u>F.</u> Management of Partnership Investments

The Program shall be continually refined to obtain the most effective mix of investments. The Program shall invest in traditional partnership investments, and, as appropriate, funds employing other structures.

<u>F.G.</u> Management of Direct Investments

The Program shall utilize two types of direct investments: <u>Co-Investments</u> and <u>Independently Sourced Investments</u>. Co-investments and

independently sourced investments may be managed through partnerships, separate account structures, or other formation structures, e.g. limited liability companies (LLCs) where the <u>general partner(s)</u> or fund manager(s) have expertise in the specified mandates and in related areas material to the success of each investment vehicle or strategy.

- 1. Co-Investments are direct investments by CalPERS together with an existing general partner or fund manager. CalPERS may invest in the same security as or a different security in the same asset class than the general partner; for example, preferred versus common stock or voting versus non-voting class of shares. The investment may be with a partnership or investment vehicle in which CalPERS has invested or it may be from another partnership or investment vehicle sponsored by the same general partner.
- 2. Independently Sourced Investments come to CalPERS through contacts other than the general partners with which CalPERS has invested. CalPERS shall avoid competing directly with its general partners in this segment where applicable.
- 3. Direct investments will be considered after the necessary staff and consultant resources are in place and the Committee approval is obtained.

<u>G.H.</u> Management of <u>Strategic Investment Vehicles</u>

Strategic investment vehicles shall include innovative structures that provide a cost effective means to access investment opportunities, exploit CalPERS strengths, and achieve the maximum risk-adjusted rates of return. Strategic investment vehicles may be either partnership or direct investments.

H.I. Transaction Processes

- 1. The Program shall process transactions efficiently. To accomplish this, Staff shall serve as the point of contact regarding all transactions flowing through CalPERS. Staff shall direct and coordinate the activities of the Program's External Resource(s). Staff will then be able to monitor and control the process and ensure that <u>due diligence</u> standards are maintained. Additionally, Staff will play a significant role in marketing the Program.
- 2. For partnerships, the policy goal will be to maintain timely responses to proposals and to process them efficiently and effectively. Partnerships in which CalPERS is already an investor shall be subject to an expedited due diligence process that

combines the on-going monitoring assessment with an update of the original due diligence. New partnerships that warrant consideration shall face a full due diligence review. Section VIII.A contains an outline of the process for evaluating partnerships.

- 3. Direct investments shall also be addressed in a timely fashion.
- 4. Strategic investment vehicles shall also be processed in a timely manner. Underlying investments shall be evaluated relative to partnership or direct investment due diligence criteria as appropriate.

<u>L.J.</u> Quality Control Processes

The Program shall employ a quality control process, which may include both Staff and External Resource(s) to monitor Program efficiency, track investment performance, and manage risk.

- 1. Monitor Process Staff monitors transaction processing to insure timely decision making and an effective process.
- 2. Monitor Portfolio Performance Actual returns are compared to the Program's performance objectives, and to the expected return for the investment.
- 3. Monitor Risk Control Program standards are maintained through the following processes:
 - a. Assess the level of diversification in the portfolio on a continual basis, including the level of diversification across investment style, geographic distribution, industry concentrations, and across other ranges as appropriate.
 - b. Track and monitor due diligence activity and review the External Resource's due diligence. Monitor External Resource's activities and internal policies and procedures.
 - c. Identify problems early and take corrective action quickly.

J.K. Risk Parameters

1. Financial Risk: Infrastructure investments may employ substantial leverage (borrowing), which may result in significant financial risk.

- 2. Liquidity Risk: Infrastructure investments may lack liquidity and may have time horizons greater than 10 years. Secondary markets for such investments can be very limited.
- Credit Risk: Credit markets experience volatility and changes in these markets may have a significant impact on the cost of financing infrastructure investments and overall transaction execution.
- 4. Political and Public Risk: Infrastructure investments may be associated with political approval and public acceptance of projects.
- 5. Labor Risk: Risks associated with public sector outsourcing, or labor relations may affect investment opportunities in infrastructure.
- 6. Regulatory Risk: Changes in regulatory conditions may affect investment returns.
- 7. Country Risk: Political, economic, and currency risks are associated with investing in all countries.
- 8. Structural Risk: CalPERS negotiates its agreements to include certain fundamental rights, protections and remedies. These basic protections include <u>advisory committee</u> participation, specific termination provisions in partnership transactions, anti-dilutions, put and call <u>options</u>, voting rights for material events, and other covenants and governance provisions in the case of direct investments.
- 9. Valuation Risk: Partnerships shall be evaluated to determine if the general partner employs an appropriate valuation discipline. For direct investments, the Staff shall review valuations to determine if they are reasonable.
- 10. Market Risk: The infrastructure market continues to develop globally and market opportunities can change depending on many variables such as market supply and demand.
- 11. Environmental and Climate Risk: Long term investment returns may be impacted by risks and opportunities related to the environment and climate change.
- 12. Hazardous Materials: Implementation of the Program shall comply at all times with CalPERS Hazardous Materials policy.

L. Guidelines for Evaluating Proposals

Proposed partnership, direct investment, and strategic investment vehicle opportunities shall be evaluated relative to their fit with the Program Strategy.

Section VIII contains outlines of specific guidelines for partnerships and direct investments, respectively. Strategic investment vehicles shall be evaluated according to the underlying structure of the investment, which may include either partnership or direct investments.

M. Renewable Energy and Sustainability

CalPERS encourages the prudent use of sustainable development methods and operational practices when reasonable and economically feasible. Consideration shall be given to the use of renewable energy technologies, recycled and renewable building materials, air and water conservation technologies and practices, and efficient waste, recycle and disposal technology and practices. Consideration shall also be given to the environmental sustainability of investments including but not limited to energy efficiency, fuel economy, alternative energy generation and distribution impacts.

VI. CALCULATIONS AND COMPUTATIONS

A. Reporting

- 1. Staff shall require periodic reports from investment partners to facilitate monitoring that are appropriate for the specific transaction.
- Staff shall monitor individual partnerships, direct investments and the portfolio as a whole. Monitoring includes diversification across alternative investment types and programs to assure an appropriate mix.

Performance Reporting

a. Partnership Investments

- (1) Objectives established by the partnership or the principals managing the investment (actual financial performance as compared to original plan):
- (2) Risk undertaken:
- (3) Performance of other similar investments;

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- (4) The short-term monitoring benchmark for partnerships in the first four years of their term; and,
- (5) The long-term performance objective, with appropriate interpretation if applied to the short-term.

b. Direct Investments

<u>CalPERS shall assess the performance of direct investments</u> <u>relative to the following areas:</u>

- (1) Actual financial performance of a company compared to the business plan and strategy;
- (2) Risk undertaken; and,
- (3) The performance of the company against its pro forma operating results, its industry and the total Program portfolio.

c. Strategic Investment Vehicles

<u>CalPERS shall assess the performance of strategic investment vehicles according to original plan and partnership and direct investment criteria as appropriate.</u>

4. Committee Reports

Quarterly and annual reports shall be provided to the Committee.

These reports shall include reviews of investments and their performance.

VII. PERMISSIBLE INVESTMENTS

CalPERS shall consider any appropriate investment opportunity with the potential to meet or exceed the Program's performance objectives. Investments shall generally fall within the categories defined below.

A. Infrastructure Sectors

CalPERS shall consider investment opportunities within, but not limited to, the following infrastructure sectors:

1. Transportation assets (e.g. - bridges, roadways, railways, transit and tunnels);

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- 2. Ports (e.g. airports, seaports, barges and terminals);
- Utilities (e.g. clean energy, pipelines, storage and distribution and power transmission);
- 4. Water (e.g. water treatment, distribution, storage, desalination and other water related investment areas);
- 5. Energy resources (e.g.- hydrocarbons, gas, geothermal, windgenerated, water-generated, and nuclear; transmission; and distribution);
- 6. Communications (e.g. broadcast and wireless towers, cable systems and satellite networks);
- 7. Social Infrastructure (e.g. educational facilities, healthcare facilities and judicial buildings); and,
- 8. Other infrastructure investments that are aligned with CalPERS strategic objectives.
- Restrictions and Prohibitions: Tobacco Companies, any investment prohibited by CalPERS Insider Trading Policy, and any other Committee approved restriction.

B. Structures and Investment Vehicles

The Program shall be implemented primarily through direct equity investments in infrastructure (either 100% owned or through partnerships, funds, joint ventures or other co-investment vehicles). Equity (privatelyheld or publicly-traded), leveraged equity, and debt instruments with equity-like features, are also appropriate structures for investments.

CalPERS shall consider a number of different vehicles for investments including, but not limited to, the following:

- 1. Equity Investments in 100% owned assets;
- 2. Equity joint-ventures or other co-investment vehicles;
- Indirect equity investments in commingled funds; private or public corporations; <u>limited partnerships</u>; or other pooled investment vehicles;
- 4. Private placements of equity or debt in public or private infrastructure operating companies;

- 5. <u>Investment grade</u> as well as lower or unrated tranches of preexisting securitized or lower structured debt instruments, such as mezzanine or other debt with equity-like features;
- 6. Leveraged equity investments;
- 7. Listed infrastructure companies, <u>Exchange Traded Funds</u> (ETF);
- 4.8. Futures or swaps on listed infrastructure indices on a fully collateralized basis; and,
- 8.Restrictions and Prohibitions: A list of prohibited investments is outlined in the Inflation-Linked Asset Class policy in Section V.B.

C. Selection Considerations

In choosing specific investment vehicles for the Program, consideration shall be given, but not limited to the following:

- Proposed investment strategy;
- 2. Expected risk and return attributes of vehicles;
- 3. Potential diversification benefits;
- 4. Investment time horizon;
- 5. Potential exit strategies and liquidity;
- Monitoring costs and feasibility;
- 7. Tax considerations;
- 8. Other incremental costs:
- 9. Fee arrangements;
- 10. Co-investment by management firm or partner;
- 11. Potential conflicts of interest:
- 12. Governance and control;
- 13. Partners or co-investors; and,

Performance track record.

D. Diversification by Geography

The Program shall seek to include investments in a variety of jurisdictions. Investments in both domestic and international markets are permitted with the relative proportion of each type at a given time to be determined based on prevailing market conditions. Regional diversification within a particular country shall also be considered when such diversification contributes measurably to risk mitigation. Section VI.B.3 provides the Regional Allocations for the infrastructure investments.

E. Diversification by Revenue and Strategy

The Infrastructure portfolio shall be diversified so that no one source of revenue is dominant in the portfolio of the Program.

The SIO-RAILAC will review the investments in infrastructure assets and vehicles regularly and identify adjustments when necessary to ensure satisfactory diversification by geography and revenue sources. Adjustments to diversification in the Program shall be implemented on an opportunistic basis over a reasonable time frame (normally within a three-year period), and with ample consideration given to preserving the investment returns to CalPERS. Section VI.B.1 provides the Portfolio Allocation for infrastructure investments.

F. Diversification by Asset Size

The size of portfolio investments shall depend on the opportunities available to CalPERS, with neither small nor large investments being dominant in the Program. Furthermore, investment size shall be appropriate to the projected risk versus return level of the investments. However, in order to have some effect on the infrastructure portfolio and to maximize relationships, a select group of investors may be utilized to invest a significant portion of the infrastructure portfolio.

G. Investment Holding Period and Dispositions

The target holding period for infrastructure assets shall generally be for long-term investment (10 years or more). However, disposition of individual investments may be triggered by an opportunity to capture a return in excess of the targeted return, or by a revised investment strategy resulting from changes in markets for infrastructure assets or changes in CalPERS financial objectives.

H. Use of Leverage

Leverage is permissible in the Program to enhance investment returns. Infrastructure assets are able to attract and service significant debt levels due to stable inflation-linked cash flows, long term concessions and off-take agreements. The program shall be managed to ensure that leverage is appropriate and that it is accretive to returns considering leverage risk. Staff will consider the debt rating, debt service ratios, leverage ratios, capital ratios and stability of cash flow in addition to the debt level (leverage) to determine if debt is excessive. The Program, measured periodically and across all investments, will carry an average debt rating of BB+ by Standard and Poor's, Ba1 by Moody's or better. Where debt ratings from Standard and Poor's or Moody's are not available for individual Program investments, the amount of leverage applied to such investment shall, on an unrated basis, approximate the targeted average rating of the Program.

Credit Rating

For investments in debt securities, the Program will carry a minimum credit rating of BB+ by Standard and Poor's, Ba1 by Moody's or the approximate unrated equivalent at the time of investment.

VIII. SPECIFIC CONSIDERATIONS

- A. Partnership and Fund Investment Guidelines
 - Minimum Requirements and Investment Styles
 - a. The principals of the investment vehicle shall demonstrate relevant experience in or directly applicable to the market in which they propose to work or the strategy they wish to execute.
 - b. The proposed strategy and business plan shall be set forth in sufficient detail to permit substantive and meaningful review of the opportunity, verification of the investment concept and risk factors, and assurance that the investment opportunity can be realized and produce the required return.
 - c. The risk- and reward trade-off in the particular market that is addressed by a partnership or fund proposal shall be attractive, based on reasonable assumptions.
 - 2. Evaluation Criteria

Primary emphasis will be on the quality and experience of the general partners in a partnership investment. Additional factors may include, but are not limited to, the following as appropriate:

- a. Fit with the Program Strategy and within the Program.
- b. Integrity of the general partner, its employees, other investors and quality of overall partnership or fund governance, management of the partnership or fund, including controls and reporting systems.
- c. Relationship with <u>limited partners</u>.
- d. Potential for co-investments.
- e. Creativity of the general partners to implement a unique strategy that is not competitive with existing investments.
- f. Reasonable ratio of investors to general partners and reasonable ratio of committed capital to general partners.
- g. Appropriateness of terms and conditions and alignment of interests with limited partners.

3. Due Diligence

A due diligence review by Staff and External Resources selected for reviewing a transaction shall include the following, when applicable:

- a. Review and analysis of all pertinent offering documents including but not limited to offering memorandums, subscription agreements, private placement memorandums and operative investment agreements.
- b. Consideration of potential conflicts of interest, if any, posed by the proposed investment and prior investments and activities of the principals.
- c. Review and analysis of the investment concept, including entry and exit strategies and terms including fees, principal participation, and structure.
- d. Review and analysis of the fit within the Program, including fit with the Strategy, other constraints and guidelines, and compliance with applicable investment policies.

- e. Review of background and reference of principals and review and analysis of track record including performance of prior and current investments.
- f. Investigation of special terms and side letter agreements with past or present investors.
- g. Analysis of the competition between a given proposal and an existing preferential relationship or alternative asset, which may include, but is not limited to, a review of the following: the size of the industry, the segment of the industry, and the deal flow for both the preferential relationship and the proposed investment.
- h. Review of any lawsuits, litigation involving the general partner, its principals, employees and prior funds.

4. Legal Constraints

Legal counsel shall be consulted for advice and interpretation of the many areas of legal concern, including but not limited to:

- a. Tax concerns;
- b. Licensing and registration requirements; and,
- c. Regulatory compliance, that is, partnerships and proposed investments must take all relevant state and federal regulatory requirements into consideration.

5. Other Parameters

- a. Types of allowable investments: Any appropriate investment opportunity which has the potential for attractive risk-adjusted returns which is not otherwise prohibited by CalPERS.
- b. Terms and conditions: Fees, <u>preferred returns</u>, profit splits, and other terms and conditions are negotiated as appropriate and when prudent.
- c. Use of fund's name: Staff and external resource(s) identify any submitted investment opportunity containing as part of its name or title any reference to CalPERS and immediately inform the proposer that inclusion of such a reference or use

is inappropriate and unacceptable to CalPERS and require that it be removed.

B. Direct Investment Guidelines

1. Minimum Requirements

- a. Management shall have compiled relevant business and management experience.
- b. The entity in which the investment is made shall be appropriately capitalized in the relevant circumstances.
- c. CalPERS exposure to direct investments shall be limited to the investment amount through appropriate formation structures (e.g. LLCs, partnerships or separate accounts).

2. Evaluation Criteria

Primary emphasis shall be on the following:

- a. The integrity of the general partner, its employees, and other investors.
- b. The historical and prospective financial condition of the company including its market position, relative competitive position within the industry and capital structure.
- c. The growth prospects of the company and its industry in light of existing and anticipated economic conditions.
- d. The underlying stability of the company's business, earnings, financial and operating controls, reporting mechanisms and the quality of the corporate governance.
- e. The quality of the company's assets, such as manufacturing facilities, inventories, receivables, and other assets, including intangibles, essential to the company's operations.
- f. The quality, stability and experience of the management team, the Board of Directors, and other investors, including the quality of their interaction.
- g. The return potential of the investment, given its terms and conditions, compared to the perceived risks and the relative return/risk profile of comparable investments.

Additional Considerations

At a minimum, additional factors shall include the following:

- a. The specific objectives and goals of the company and its management team including the strategy to be employed to achieve the aforementioned objectives and goals. Management and investors should have a well thought-out plan for creating and realizing value from the company.
- b. The controlling shareowner(s) and other institutional investors.
- c. The relationship with the management team, the Board of Directors, other investors and any controlling shareowners.
- d. The potential for future follow-on investment opportunities.

4. Due Diligence

For co-investments, Staff, and External Resources if utilized, will rely heavily on the work of the general partner sponsoring the transactions while conducting its own due diligence. Independently sourced investments will require a much more in-depth due diligence review because these investments do not come to CalPERS through one of the existing general partners in the portfolio.

A due diligence review by Staff and the External Resources if selected for reviewing a transaction shall include the following, when applicable:

- Review of whether the proposed investment falls within the Strategy, constraints and guidelines, and if it complies with applicable investment policies.
- b. Review and analysis of all pertinent documents, including offering memorandums, research reports, annual and quarterly reports, SEC reports, proxy statements and news articles regarding the company, management and industry.
- c. Performance of background checks of the senior management team and any controlling shareowners.
- d. Review of the company's historical and projected financial operating results, market position, and present financial

- condition, including examination of auditor reports and possible interview of the auditor.
- e. Review and analysis of any contingent liabilities, including potential liabilities related to anticipated legal action, environmental issues, under-funded pensions, taxes and insurance issues.
- f. Review and analysis of ownership structure, employee benefit plans, anti-takeover provisions, labor contracts, and as appropriate, consultation with relevant labor representatives.
- g. Performance of third party reference checks with key suppliers, customers and, when advisable, competitors.
- h. Review of the company's instruments of indebtedness, corporate instruments, board minutes and any special agreements between the company and other major investors.
- i. Review and analysis by counsel of all relevant state and federal regulations and regulatory reports, examinations and ratings regarding the company and its business sector.
- Conduct visits to the company's principal facilities and corporate headquarters and interviews with board members, senior management and controlling shareowners.

5. Legal Constraints

Legal counsel shall be consulted for advice and interpretation of the many areas of legal concern, including but not limited to:

- a. Tax concerns:
- b. Licensing and registration requirements; and,
- Regulatory compliance, that is, partnerships and proposed investments must take all relevant state and federal regulatory requirements into consideration.

6. Other Parameters

- a. Method of Participation: CalPERS generally participates as a preferred or common stockholder or as a senior or subordinated debt investor with common stock participation.
- b. Types of Allowable Investments: Any appropriate investment opportunity which has the potential for attractive risk-adjusted returns and which is not otherwise prohibited by CalPERS.
- c. Terms and conditions: Fees, preferred returns, profit splits and other terms and conditions are negotiated as appropriate and when possible.
- d. Use of CalPERS name: Staff and external resource(s) identify any submitted investment opportunity containing as part of its name or title any reference to CalPERS and immediately inform the proposer that inclusion of such a reference or use is inappropriate and unacceptable to CalPERS and require that it be removed.
- e. Corporate Governance

Consistent with CalPERS policies on Corporate Governance,

- (1) Voting: CalPERS shall maintain full voting rights with respect to any class of securities in which it might invest. Where applicable, CalPERS shall execute all proxies and voting instructions in a manner consistent with CalPERS Statement of Investment Policy for Global Proxy Voting. When appropriate, CalPERS may wish to participate as part of a voting trust agreement under which a third party (e.g., a lead investor) retains its proxy to vote CalPERS interests.
- (2) Board of Directors Representation: CalPERS shall consider seeking representation on the board of directors of a corporation in which it invests, in a manner consistent with CalPERS Statement of Investment Policy for Representation on Corporate Boards of Directors. CalPERS may wish to retain the right to have an independent representative or representatives of CalPERS appointed to a portfolio company's Board of Directors. Furthermore, the fund should allow for the possibility to retain the right to have such representatives participate in select

committees of such Board of Directors (e.g., Audit Committee, Executive Committee or Compensation Committee).

- (3) Board of Directors Accessibility: CalPERS should strive to obtain the right to attend, as an observer, a portfolio company's Board of Directors meeting. Directors should be accountable to CalPERS as a shareowner. To ensure this accountability, directors must be accessible to CalPERS inquiries concerning key decisions affecting the company's strategic direction.
- (4) Board of Directors Composition: Board Composition should follow corporate governance best practices consistent with CalPERS Global Principles of Accountable Corporate Governance. CalPERS should strive to obtain agreements as to the composition of a Board of Directors, including guidelines on the number of outside Directors and the composition of key committees.
- (5) Special Voting Rights: With the exception of Global Equity portfolio companies, CalPERS should, if desirable, strive to obtain special class voting rights with respect to specific corporate governance matters such as proposals deemed contrary to CalPERS interests, for example, as in the case of hostile takeovers.

IX. GLOSSARY OF TERMS

Key words used in this policy are defined in CalPERS Master Glossary of Terms. CALCULATIONS AND COMPUTATIONS

A.___Reporting

- 1.Staff shall require periodic reports from investment partners to facilitate monitoring that are appropriate for the specific transaction.
- Staff shall monitor individual partnerships, direct investments and the portfolio as a whole. Monitoring includes diversification across alternative investment types and programs to assure an appropriate mix.
- 3. Performance Reporting

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C.Partnership Investments

- (1)Objectives established by the partnership or the principals managing the investment (actual financial performance as compared to original plan);
- (2)Risk undertaken;
- (3)Performance of other similar investments;
- (4)The short-term monitoring benchmark for partnerships in the first four years of their term; and,
- (5)The long-term performance objective, with appropriate interpretation if applied to the short-term.

D.Direct Investments

CalPERS shall assess the performance of direct investments relative to the following areas:

- (1)Actual financial performance of a company compared to the business plan and strategy;
- (2) Risk undertaken; and,
- (3)The performance of the company against its pro forma operating results, its industry and the total Program portfolio.

E.Strategic Investment Vehicles

CalPERS shall assess the performance of strategic investment vehicles according to original plan and partnership and direct investment criteria as appropriate.

4. Committee Reports

Quarterly and annual reports shall be provided to the Committee. These reports shall include reviews of investments and their performance.

Approved by the Policy Subcommittee: June 16, 2008

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FORESTLAND PROGRAM

July 1, 2011 April 11, 2011

I. PURPOSE

This attachment to the <u>RealInflation-Linked</u> Assets Policy sets forth the investment policy ("Policy") for the Forestland Program ("Program").

II. STRATEGIC OBJECTIVE

In addition to strategic objectives described in the Real Assets Policy, section II., <u>t</u>The Forestland Program shall be managed to accomplish the following:

- A. Preserve investment capital.
- B. Generate attractive risk-adjusted rates of return for CalPERS as a total return investor, including the following components:
 - 1. Provide, at a minimum, moderate to low cash flow from operations with the generation of cash flow secondary to producing long term total returns; and,
 - 2. Provide appreciation potential as a result of biological growth and employing active best management techniques and practices.
- C. Provide a hedge against inflation.

III. RESPONSIBILITIES

In addition to rResponsibilities are described in the RealInflation-Linked Assets Class Ppolicy, section III., CalPERS Investment Staff ("Staff") is also responsible for reporting to the Committee quarterly or more frequently if needed about the performance of the Program.

IV. PERFORMANCE OBJECTIVES AND BENCHMARK

The Portfolio shall be managed to achieve the following long-term objectives, net of fees.

A. The performance objective of the Program is to meet or exceed the benchmark Exceeding a minimum target real rate of return of 5% after fees (inflation plus a premium of 5%, inflation measured by the United States Bureau of Labor Statistics Consumer Price Index for All Urban Consumers -CPI-U).

B. The benchmark for the Program is specified in the Benchmark Modification and Benchmark Details Policy Achieving real rates of return from individual assets held in the Portfolio that exceed a target rate that is adjusted for risk depending on the nature of the investment and the country and region in which it is located with the overall target stated in paragraph A above as the benchmark.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Asset Allocation

<u>The asset allocation range for the Program is governed by the Real Assets Policy, section V.</u>

From time to time, the actual allocation may fall out of the ranges prescribed by the Policy. In these instances, adjustments to correct the actual percentage in order for it to comply with the Policy allocation range shall be implemented on an opportunistic basis over a reasonable time frame (within a three-year period with CIO approval and otherwise within one year), and with full consideration given to preserving the investment returns to CalPERS. Staff will report quarterly to the Committee any time that the actual forestland investments are outside the allocation range.

B. Sustainability Considerations

Maximizing the economic benefits to CalPERS is the primary objective of the Portfolio. The management of each investment shall incorporate sound principles for environmental management and social responsibility with full consideration of impacts on biodiversity, water and air quality, soil conservation and local communities especially indigenous groups. Respecting the desire to maintain and enhance environmental quality and the social and economic benefits accruing to local communities, CalPERS shall strive to use the best and highest forest management standards commercially and economically feasible while meeting or exceeding the performance objective. To this end, investment opportunities involving forests that have achieved independent environmental or forest certification will be sought. For assets not yet certified to such a standard, proponents and managers of the properties will be encouraged to seek certification and commit to a fixed time table for its realization. In such cases, due diligence procedures will include benchmarking management practices against an international or national standard for forest management appropriate for the region in which the asset is located.

<u>C</u>B. Non-conventional Forestland Investments

Investments in <u>emerging product markets</u> for forestlands involving non-traditional sources of revenue such as <u>carbon sequestration</u> and the production of feed stock for bio-fuels from both woody (e.g. traditional timber species, bamboo) and non-woody (e.g. switchgrass) vegetation are permitted. These investments will be subjected to the same performance requirements as traditional forestland investments and will be scrutinized rigorously prior to committing funds and monitored closely to ensure acceptable performance.

<u>D</u>C. Investment Objectives and Criteria

Implementation of this Program shall comply at all times with the applicable CalPERS investment policies.

- 1. Investment quality
 - a. Forestland tracts shall be comparable in quality to those held by other institutional investors or the forest products industry to enhance an exit strategy. The following parameters shall be used as a guide when relevant to assess comparability to investment grade forestland assets for possible inclusion in the Portfolio:
 - 1. **Soils** soil structure and fertility should be as good or better on average than comparable industrial tracts.
 - 2. **Rainfall** the annual average and distribution of rainfall should be similar to that for observed on nearby industrial tracts.
 - 3. **Stocking** the forest should be fully stocked with vigorous healthy trees and species that are matched to the sites with no backlog of unplanted land.
 - 4. **Genetic stock** for plantations, the provenance of the planted trees should be appropriate for the sites and have shown good growth and form characteristics.
 - 5. <u>Silvicultural</u> practices the silvicultural prescriptions applied by the current owner and proposed by the candidate investment manager/property manager should be proven as appropriate for the species, sites, and target markets. There should be verifiable

- evidence that the prescriptions have been implemented as planned.
- 6. **Fire threat/protection** the threat of fire should be low and proven protection capacity should exist for the asset and neighboring lands.
- 7. <u>Biotic risks</u> there should be little or no evidence or history of problems with insect, or fungal, pathogens or harmful animals.
- 8. <u>Abiotic risks</u> there should be little or no evidence or history of problems from wind throw, flooding, snow press, and other abiotic risks.
- 9. **Diverse competitive markets** the forest should be located in proximity (economically viable) to diverse and competitive markets for the full range of products expected to be generated by the forest.
- Well developed transportation network the private and public transportation network (roads, rail, and waterways) should be well developed and well maintained as warranted.
- 11. **Labor** there should be no evidence of labor shortages or labor disruptions for manufacturing phases relevant to the investment.
- 12. **Tenure** the property should have secure, defensible legal title with no evidence of outstanding land claims, whether the intention is to buy the land or use some other form of contractual arrangement (lease, joint venture, and license).
- 13. **Liabilities** there should be no outstanding material regulatory (environmental, silvicultural, protected areas, taxation, other) liabilities associated with the property.

2. Diversification

The Portfolio shall be appropriately diversified to reduce risk. The Portfolio shall be managed to maintain a degree of diversification with regard to geography, forest cover and revenue sources including emerging product markets.

a. Diversification by Geography

The Portfolio shall include investments in a variety of jurisdictions. Investments in both domestic and international markets are permitted with the relative proportion of each type at a given time to be determined based on prevailing market conditions. Regional diversification within a particular country shall also be considered when such diversification contributes measurably to risk mitigation.

b. Diversification by Forest Cover

The Portfolio shall include assets that are diversified with respect to forest cover including a variety of species in both the softwood and hardwood species groups. Diversification can also be enhanced by investments in non-traditional woody and non-woody species. Diversification by forest cover shall be consistent with the Portfolio requirements for financial performance and risk mitigation.

c. Diversification by Revenue Source

The Portfolio shall be diversified so that no one source of revenue (bio-fuel, carbon sequestration, pulpwood, sawtimber, specialty hardwood, non-timber) dominates the Portfolio.

The SIO-RAILAC will review the investments in forestland assets regularly and order adjustments when necessary to ensure satisfactory diversification by geography, forest cover and revenue sources. Adjustments to diversification in the Portfolio shall be implemented on an opportunistic basis over a reasonable time frame (normally within a three-year period), and with ample consideration given to preserving the investment returns to CalPERS.

Investment Asset Size

Investments in the Portfolio shall have a range of sizes to both enhance liquidity of the Portfolio and enable participation in larger opportunities while maintaining significant control over management. An individual investment shall be one or more parcels of forestland with unity of title, use, and contiguity. Noncontiguous parcels of land may be considered an individual investment if there is unity of operation.

4. Investment Holding Period/Dispositions

The target holding period for forestland assets shall generally be for long-term investment (10 years or more). However, disposition of individual investments may be triggered by an opportunity to capture a return in excess of the targeted return, or by a revised investment strategy resulting from changes in markets for forest products or changes in CalPERS financial objectives.

5. Leverage

The Program normal loan-to-value ratio is limited to 40%. The loan-to-value ratio limit may be extended to 50% for up to three years with Chief Investment Officer approval and up to one year with SIO-RAHLAC approval in order to permit a gradual decline in debt on acquisitions and to maintain a flexible and optimal harvesting scheduled. Staff will report quarterly to the Committee on the loan-to-value ratio any time that the leverage exceeds 40%. In any use of leverage, the debt service payments should not drive harvesting activities.

6. Investment Manager and Property Management

- a. The investment manager shall be responsible for developing operating management plans, strategic plans and budgets, and on-site supervision of each forestland holding. Individual assets must be physically inspected at least once a year. Emphasis shall be placed on active management to capitalize on opportunities that add value.
- b. On-site property management shall be conducted, under the supervision of the investment manager, by firms with an established presence in the local forestland markets and demonstrated expertise in optimizing forestland property performance.
- Management shall comply with all laws and regulations applicable to the jurisdictions where the forestland assets are located.
- d. Where prudent and economically practical, revenue sources from non-timber resources such as hunting, fishing, gathering, and recreation shall be permitted. A full investigation of the legal liabilities associated with both destructive and non-destructive use of non-timber forest

resources, whether for fees or not, shall be completed prior to permitting such use.

7. Contractual Arrangements

Equity ownership of forestland assets is the preferred method of investment. However, other contractual arrangements such as long-term lease, joint venture, and <u>forest licenses</u> are permitted. All types of contractual arrangements shall include exclusive ownership or use rights for the land, timber and non-timber resources, water, sequestered carbon, and minerals whenever possible.

8. Prohibited Investments

The purchase of land for the primary purpose of commercial land development and speculation shall be prohibited. Investments that involve forced labor, the illegal or harmful use of child labor, violation of community or indigenous peoples' legal or <u>usufruct rights</u>, or violation of laws or regulations pertaining to threatened or endangered species are prohibited.

D. Asset Allocation

The asset allocation range for the Forestland Asset Portfolio is governed by the Inflation-linked Asset Class policy, section V.

From time to time, the actual allocation may fall out of the ranges prescribed by the Policy. In these instances, adjustments to correct the actual percentage in order for it to comply with the Policy allocation range shall be implemented on an opportunistic basis over a reasonable time frame (within a three-year period with CIO approval and otherwise within one year), and with full consideration given to preserving the investment returns to CalPERS. Staff will report quarterly to the Committee any time that the actual forestland investments are outside the allocation range.

E.—Risk Management

The Portfolio will employ strict risk management procedures during the pre-investment due diligence, investment monitoring, and exit due diligence stages of investments. The purpose of these risk management exercises is to identify the full range of risks to the investment, rank the risks according to potential impact on the investment and then rigorously test the proponent's projections and responses to questioning relating to the identified risks to ensure their logic and analyses are sound.

Due diligence prior to committing funds shall involve a rigorous review and confirmation of the financial, legal and operational aspects of the proposed investment. Qualified, experienced and independent advisors shall be engaged to perform the required reviews and verifications of proponent information and projections. The experience of a chosen advisor shall be appropriate for the type of production systems (e.g. timber, carbon sequestration) that contribute to revenue generation from the forest.

Investment monitoring programs shall be established for each Forestland Asset specifying the scope, frequency and degree of rigor for the periodic reviews. For investments dependent on emerging product markets, monitoring shall be more frequent and more rigorous than with traditional forestland investments.

Due diligence at the exit stage of the investment shall involve a rigorous review and confirmation of the financial aspects of the proposed sale.

VI. CALCULATONS AND COMPUTATIONS VALUATIONS

All calculations and computations shall be on a fair market value basis unless otherwise noted. Market value, as defined by the Uniform Standards of Professional Appraisal Practice (USPAP) of the Appraisal Foundation, shall be incorporated when reporting fair market value for accounting purposes. The standards of the forest industry in appraising forestlands shall be followed where there are differences between USPAP and forest industry practices.

VII. GLOSSARY OF TERMS

Key words used in the policy are defined in CalPERS Master Glossary of Terms.

Timber Real Estate

Approved by the Policy Subcommittee: August 12, 1998 Adopted by the Investment Committee: September 14, 1998 Revised by the Policy Subcommittee: October 6, 2000 Approved by the Investment Committee: November 13, 2000 Revised by the Policy Subcommittee: December 14, 2001 Approved by the Investment Committee: December 17, 2001 Revised by the Policy Subcommittee: December 10, 2004 Approved by the Investment Committee: February 14, 2005

Name change to Forestland Program

Revised by the Policy Subcommittee:

Approved by the Investment Committee:

Revised by the Policy Subcommittee:

April 19, 2010

Approved by the Investment Committee:

May 17, 2010

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Revised by the Policy Subcommittee:	April 11, 2011
Approved by the Investment Committee:	May 16, 2011
Policy Effective:	July 1, 2011

Asset Class Glossary: Real Assets Policy: Real Assets July 1, 2011April 11, 2011

Appreciation Return

The percentage change in the market value of a property or portfolio, adjusted for capital improvements and partial sales, over a period of analysis.

Advisory Committee

A group of investors in the partnership whose primary functions are to address certain partnership-related issues. Based on the roles and responsibilities outlined in limited partnership agreement, the Advisory Committee may review conflicts of interest, approve valuation policies, review operating budgets, vote on partnership term extensions, and perform other duties as deemed appropriate.

Benchmark Index

The benchmark index will be a standard to judge the performance of the portfolio. A benchmark index may be a subset of a market index after screening for sufficient liquidity or other criteria.

Bio-fuel

Fuels derived from biological sources such as ethanol produced from wood or corn.

Biodiversity

The variation of taxonomic life forms within a given ecosystem.

Biotic Risks

Risks to the health and well-being of forests that originate from biological sources such as insects, mammals and fungi.

Carbon Sequestration

The accumulation and storage of elemental carbon.

Chief Investment Officer

Heads the CalPERS Investment Office and works with the Investment Committee to develop a long-term investment policy and asset allocation strategy for the Public Employees' Retirement Fund.

Co-investment

The capital of the general partner or investment manager of a separate account or commingled fund which is invested in the venture.

Co-Investments

Direct investments into a portfolio company by limited partners and general partners or members.

Commingled Fund

An investment vehicle that pools individual accounts of multiple investors, which includes CalPERS. Each account holder owns units of the commingled fund similar to holding shares in a mutual fund.

Credit Accommodation

The term generally refers to a guaranty executed by CalPERS whereby CalPERS agrees to pay the debt obligation of an entity, in the event the entity fails to pay the debt obligation. The entity will usually be a limited partnership or limited liability company, and will be majority-owned by CalPERS. The debt obligation that CalPERS guarantees will be evidenced by an extension of credit (e.g., loan, line of credit, or other form of credit facility) by a financial institution to the entity. The benefit provided to CalPERS is that the guaranty will tend to lower the borrowing cost for the entity and should, in turn, enhance the overall return to the real estate investment. Guarantees become a contingent liability on the CalPERS' overall balance sheet and should be used only when they provide economic benefit. Credit accommodation differs from credit enhancement in that a credit accommodation is not rated and does not use CalPERS' Credit Enhancement Program (CEP) rating (either implied or explicitly). In addition, Credit Accommodation is made for an entity in which CalPERS has an existing, or proposed, ownership interest. Credit enhancement is the use of CalPERS' balance sheet, through the program rating, in which CalPERS has no initial ownership interest and where CalPERS receives explicit consideration for the enhancement.

Credit Accommodation Outstanding

The total amount of credit accommodation that is currently being utilized on investments.

Debt Financing Amount

Refers to any debt financing amounts committed to a relationship. May include, but is not limited to, public, private, secured or unsecured, fixed or variable rate credit lines, subscription lines, credit guarantees, credit accommodations, credit enhancements, property debt, portfolio debt, joint venture or entity debt for commingled funds, separate accounts or targeted transactions.

Debt Service Coverage Ratio

The annual net operating income divided by the annual debt service.

De minimis

Trifling, minimal. So insignificant that a court may overlook it in deciding an issue or case.

Direct Investments

An investment in which CalPERS has ownership interest in a property or group of properties.

Disposition Amount

Refers to capital commitments for equity. May include annual dispositions, multi-year or other periodic commitments to commingled funds, separate accounts or targeted transactions.

Downstream Joint Ventures

Downstream Joint Ventures are partnership agreements executed by the operating partner of a joint venture funded by CalPERS (the Upstream Joint Venture).

Due Diligence

The process of investigating, evaluating, and analyzing a potential investment's characteristics, investment philosophy, and terms and conditions.

Emerging Product Markets

Markets for non-traditional products from forests such as sequestered carbon or feedstock for bio-fuels that are new and generally not well established (emerging).

Emerging Real Estate Market

A market classified by FTSE as an emerging market based on an assessment of World Bank gross national income per capita, as well as factors related to the market and regulatory environment, custody and settlement, trading, development of a derivatives market and size of the country's stock market. Emerging Real Estate Markets are distinguished from: (1) Developed Markets which are markets domiciled in high-income countries, as defined by the World Bank, that most investors consider to have a well-developed operating and regulatory structure for its capital markets. These markets are included in the FTSE Benchmark Classification as Developed Markets. (2) Frontier Markets which are markets domiciled in low-income countries, as defined by the World Bank, whose capital market structure and regulatory mechanisms are not developed enough to be included in Emerging Markets. These are markets that are investable but not classified by FTSE as Developed or Emerging Markets. (3) Uninvestable Markets which are those markets that are not classified by FTSE as Developed, Emerging, or Frontier Markets. These markets generally lack a convertible currency and do not allow for investment by non-residents.

Exchange Traded Funds (ETF)

An investment company that is legally classified as an open-end company or a Unit Investment Trust. An ETF is not classified as a mutual fund by the Securities and Exchange Commission because of limited redeemability. A typical ETF is similar to an index fund, and will invest either all of the securities of a selected index or a representative sample of the securities included in the index.

External Resources

Includes management consultants, accountants, attorneys, industry specialists, traditional pension fund consultants, investment bankers, or industry experts.

Fair Market Value

A valuation term defined as the highest cash price a property would bring if exposed for sale in the open market by a willing seller to a willing buyer with both parties to the transaction being fully informed of all the uses and purposes to which the property is reasonably adaptive and available.

Fiduciary Standard of Care

The consultant or external resource shall discharge its duties with respect to this system solely in the interest of the participants and beneficiaries by acting with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an enterprise of a like character and with like aims.

For Sale Residential and Land Development

Includes land primarily zoned as for sale residential or land held with the expectation of being rezoned to residential use. Includes path of growth investments, land development transactions, and construction of homes. Projects can be attached housing (typically condominium projects) or detached single family housing.

Forest Certfication

The independent evaluation of forest management practices against a national or international standard for best practices.

Forest License

Legal authority normally granted by government or its agent to manage forestlands and harvest and utilize forest resources for some specified period of time.

Frontier Real Estate Market

Frontier Markets which are markets domiciled in low-income countries, as defined by the World Bank, whose capital market structure and regulatory mechanisms are not developed enough to be included in Emerging Markets. These are markets that are investable but not classified by FTSE as Developed or Emerging Markets.

FTSE EPRA NAREIT Global Total Return Real Estate Index

Financial Times Stock Exchange (FTSE) European Public Real Estate Association (EPRA) National Association of Real Estate Investment Trusts (NAREIT) Global Total Return Real Estate Index is a Global Total Return Real Estate Index designed to track the performance of listed real estate companies and Real Estate Investment Trusts worldwide.

General Partner

The General Partner of a limited partnership.

General Pension Consultant

An individual or organization that provides specialized professional assistance to the Investment Committee in determining the pension fund's asset allocation model or optimal combination of investments in order to maximize risk-adjusted investment returns in a manner consistent with the State's long-term pension liabilities.

Hedge (Hedging)

A strategy used to offset investment risk. A perfect hedge is one eliminating the possibility of future gain or loss.

Hotel

Includes budget, mid-scale, upscale, luxury, and extended stay properties. May include attached convention centers, retail, parking structures and entertainment facilities. Development projects (vertical construction) which are primarily hotel are included in this category.

Housing Joint Ventures

Housing joint ventures refer to properties that are acquired with the intention to develop or construct homes, including all forms of development for single family housing, such as condominiums, town homes, zero lot line developments, planned unit developments with and without common areas, and standard subdivisions.

Incidental Development

Incidental commercial/multi-family infrastructure lot development may be undertaken in the program, provided that it is not a major cost of the overall single family project.

Independently Sourced Investments

Direct investments that come to CalPERS through contacts other than the partnerships and LLCs with which CalPERS typically invests.

Industrial

Multi-tenant or single tenant buildings including manufacturing, warehouse (logistics), light industrial/assembly, truck terminals, trailer storage lots and bulk distribution. Also includes Research and Development, Flex and Office Showroom space. Typically a portion of the building is finished out into office space. Development projects (vertical construction) which are primarily industrial are included in this category.

Interest Rate Caps

Designed to provide insurance against the rate of interest on a floating rate loan rising above a certain level (known as the cap rate).

Interest Rate Collar

A security which combines the purchase of an interest rate cap and the sale of a interest rate floor to specify a range in which an interest rate will fluctuate.

Interest Rate Swaps

Private agreements between two parties to exchange cash flows in the future, according to a prearranged formula.

International

Any geographic location other than the eight domestic U.S. NCREIF regions and U.S. territories.

Investment Amount

Refers to any equity amounts committed for investment to a relationship. May include, but is not limited to, annual allocations, multi-year allocations or commitments to commingled funds, separate accounts or targeted transactions.

Investment Transaction Amounts

Refers to the sum of the three individual definitions for Investment, Disposition, and Debt Financing Amounts. The combined term is utilized in the Policy and Real Estate Delegation Resolution to describe transactions which staff will or will not have discretion to execute.

Investment Grade

A minimum credit rating of Baa3 by Moody's Investor Service or BBB- for Standard & Poor's Corporation, and BBB- by Fitch. Investment grade ratings apply to issuers whose financial risk is relatively low and the probability of future payment relatively high.

Joint Venture

A partnership, limited liability company or corporation formed by two or more entities for the purpose of investing or operating a business as co-owners.

Key Policy Parameters

Analytical measures of the Real Estate Portfolio which have limits and ranges, or both, specified in the Real Estate Policy. The Key Policy Parameters are: 1. Risk Classifications; 2. Geographic Guidelines; 3. Property Type; 4. Public Securities Limitation; 5. Loan to Value Limits; 6. Debt Service Coverage Ratio; and 7. Recourse Debt Limitation.

Land Development

The entitlement, subdividing and construction of infrastructure for a land parcel. Typically subdivided parcels are then sold to a third party for vertical construction. Land development transactions typically have portions which are zoned and planned for commercial and portions which are planned for residential.

Leverage

The use of borrowed money to make an investment, including all forms of debt and financing structures.

Limited Liability Companies

A company, authorized by statute in some states, that is characterized by limits on members' liability, management by members or managers, and limitations on ownership transfer.

Limited Partner

The Limited Partner in a limited partnership.

Limited Partnership

An investment vehicle with the General Partner and Limited Partner(s). The Limited Partner's liability is generally limited to its capital invested.

Mixed Use Properties

Properties that are any mix of the five product types: office, retail, industrial, multifamily and hotels. Properties that include only a small percentage (20% or less) of a second product type are generally not considered mixed use (for example, an office building with a retail shop).

Multifamily

Includes high-rise, low rise and garden style rental residential properties. May be specialized rental properties such as student housing, military housing, affordable housing or age restricted housing. Development projects (vertical construction) which are primarily multifamily are included in this category.

National Council of Real Estate Investment Fiduciaries Index (NCREIF)

A property level performance benchmark for institutionally owned real estate. The benchmark is composed of an income return, an appreciation return and a total return and is calculated on a quarterly basis.

NCREIF Farmland Index

National Council of Real Estate Investment Fiduciaries Farmland Index; may be used as a benchmark for performance objectives.

Net Asset Value - NAV

The Net Asset Value or NAV is a term used to describe the value of an entity's assets less the value of its liabilities.

Non-recourse Debt

Debt that may be recourse to a Separate Account or a Commingled Fund but for which CalPERS has no obligation.

Office

Includes central business district high-rise and suburban low and mid-rise buildings with finished office space. May be single tenant or multi-tenant. Includes specialized buildings such as medical office buildings and government buildings. May include

attached parking structures and miscellaneous uses. Development projects (vertical construction) which are primarily office are included in this category.

Operator

Any individual, partnership, limited liability company or corporation which is responsible for day to day management of a commingled fund or joint venture. Also known as the General Partner, Managing Member, Manager, etc.

Opportunistic

An established investment program temporarily investing outside its benchmark or asset category based on current favorable market conditions.

Option

Contracts that give the purchaser the right, but not the obligation, to buy or sell an underlying instrument at a certain price (the exercise or strike price) on or before an agreed date (the exercise period). For this right, the purchaser pays a premium to the seller. The seller (writer) of an option has a duty to buy or sell at the strike price, should the purchaser exercise his right.

Optimization

Management of an investment portfolio in such a way that return is maximized for a given level of risk and other constraints, or risk minimized for a given expected return level and other constraints.

Other Property Types

Includes real estate related assets not included in one of the following categories: office, industrial, retail, multifamily, hotels, for sale residential and land development, or urban mixed-use. Examples would include Real Estate Operating Companies and Self Storage Facilities.

Passive Portfolio

Investing in a manner that attempts to replicate the characteristics and performance of a market index. In theory, passive investing/management assures investment performance is neither worse nor better than the market as a whole. In practice, actual results differ from the results reported for the index due to transactions costs and tracking error.

Preferred Return

A term in the partnership agreement that describes a minimum return that is paid to the limited partners before the general partner receives any share of the profits.

Prudent Person Opinion

An opinion from a consultant or external resource subject to the Fiduciary Standard of Care that the proposed investment is a prudent investment consistent with Article XVI, Section 17(c) of the California Constitution and Section 20151(c) of the California Government Code, i.e., made with the care, skill, prudence, and diligence under the

circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

Real Estate Consultant

A consulting firm hired by the Committee to advise the Committee on Real Estate issues. The Real Estate Consultant reports to the Committee.

Real Estate Delegation Resolution

A separate resolution and document that conveys authority from the Investment Committee to Staff to execute investment transactions that comply with guidelines.

Real Estate Manager

A firm hired to manage a real estate portfolio (typically public securities) for CalPERS.

Real Estate Operating Companies

Companies with revenue derived from real estate services such as property management, brokerage, construction, development and investment management.

Real Estate Partner

A firm which acts as the general partner or investment manager in a separate account or commingled fund in which CalPERS has an investment.

Real Estate Strategic Plan

A multi-year plan that describes how the Real Estate Unit and Portfolio will be structured, staffed, and managed. The plan also addresses how to invest, where to invest, and how much to invest. Additionally, the plan states the objective and role of CalPERS overall investment portfolio.

Real Rate-of-Return

A nominal return adjusted to exclude the impact of inflation.

Reconstitution

The screening which occurs periodically for potential additions or deletions to the index. The screening examines the market capitalization of Real Estate Investment Trust (REIT) stocks, their content, concentration of ownership and position in the market sector. Stocks which no longer meet the criteria of the REIT index according to this policy will be eliminated from the index while new stocks which have qualified in the past year are included. A tolerance level will be applied to stocks which have dropped from the index since the past year in order to minimize transactional costs.

Recourse Debt

Recourse debt is debt for which CalPERS has the obligation (direct or indirect, absolute or contingent) to pay the debt to the lender.

Recourse Debt Allocated

The amount of recourse debt which has been allocated to an investment strategy and may or may not have been drawn or utilized to date.

Retail

Multi-tenant or single tenant buildings where tenants sell goods, food, services, or entertainment. Includes enclosed malls, open air malls, power centers, neighborhood centers and street retail. Also includes theaters and entertainment centers. Development projects (vertical construction) which are primarily retail are included in this category.

Senior Investment Officer of Global Real Estate

The Senior Investment Officer is responsible for all Global Real Estate programs and reports directly to the Chief Investment Officer of CalPERS.

Separate Account

A partnership between CalPERS and a Real Estate Partner through which the Real Estate Partner manages Investment, Disposition, and Debt Financing Amounts of behalf of CalPERS.

Side by Side Investment

An investment made along side a commingled fund typically in a property too large for the fund to absorb. Terms for side by side investment may be more favorable than those of the commingled fund.

Silviculture

The theory and practice of controlling forest establishment, composition and growth.

Spring-Fed Pool

A list of outside consulting firms selected based on RFI or RFP processes which serve as independent fiduciaries for the Global Real Estate Unit.

Staff Internal Procedures Manual

A manual that describes the detailed procedures Staff is required to follow in managing the Real Estate program including the investment process.

Strategic Investment Vehicles

Special-purpose investment vehicles formed by CalPERS with other partners to make strategic investments.

Subscription Financing

Subscription financing is a form of leverage in which debt incurred by an investment partnership is secured by the capital commitment of an investor, which may be used to pay the debt for the investment partnership.

Subscription Financing Allocated

The amount of subscription financing which has been allocated to an investment and may or may not have been drawn or utilized to date.

Subscription Financing Outstanding

The amount of subscription financing that is currently being utilized on investments.

Sustainability

Balancing the fulfillment of human needs with the protection of the natural environment so that these needs can be met not only in the present, but in the indefinite future.

Transaction

A event between a buyer and a seller during which assets are exchanged for payment. Typically documented in some form of agreement.

Tracking Error

The annualized standard deviation of the difference between the total return of the portfolio and the total return of the benchmark. The term tracking error is frequently used to describe return deviation, the total return of a portfolio, minus the total return of a benchmark index.

Uniform Standard of Professional Appraisal Practice (USPAP) of the Appraisal Foundation

May be referenced for a standard definition of "market value" or "fair market value" for accounting purposes.

Urban Mixed-Use

Urban mixed-use investments include, but are not limited to low-to-moderate-income housing, multi-family low-income housing, commercial or residential or both, urban infill, community redevelopment, and rehabilitation of core properties. Can also include acquisition, development, redevelopment, repositioning, conversion, and eventual disposition of office, retail, residential, hotel, and mixed-use projects.

Usufruct Rights

The right to use and derive profit or benefit from property that belongs to another person, as long as the property is not damaged.